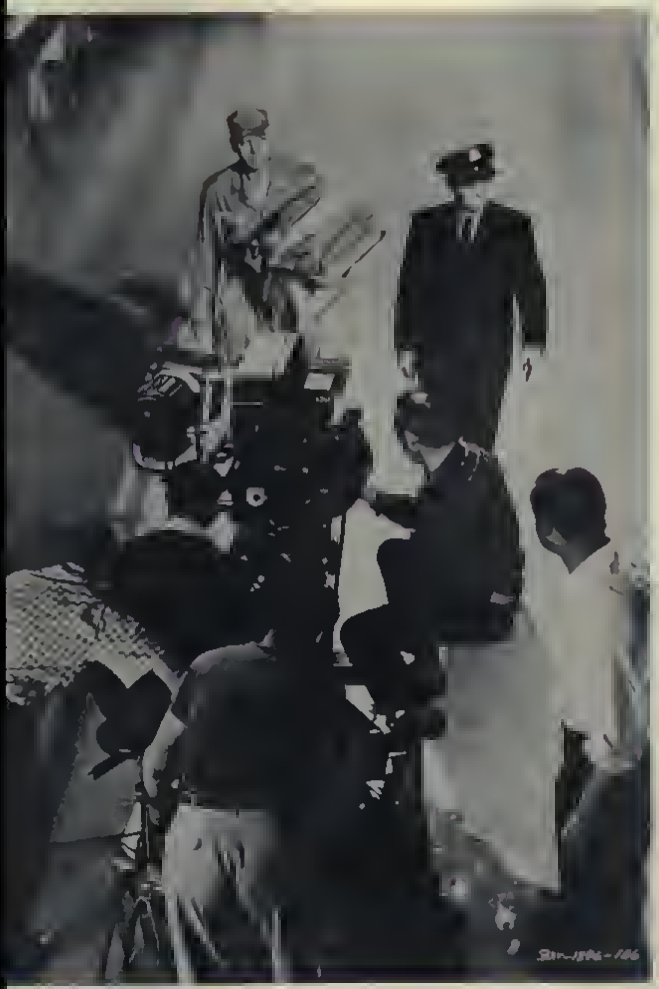
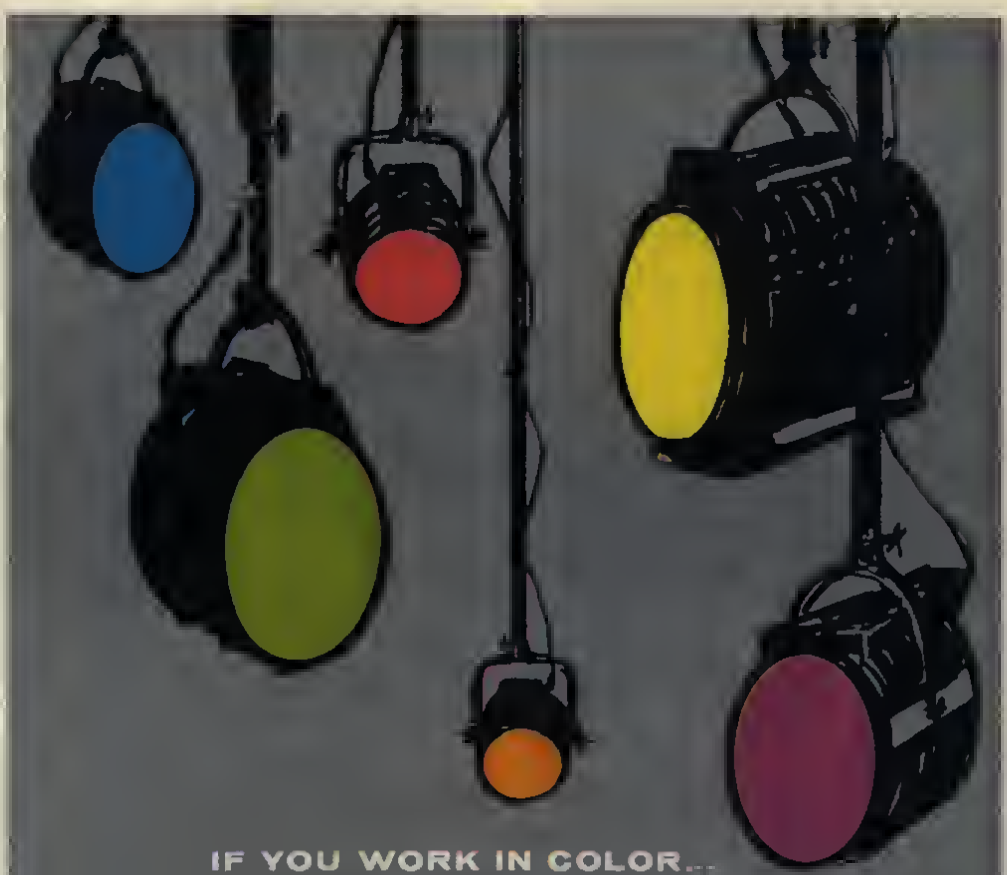
JUNE, 1962 • 35¢

AMERICAN Cinematographer

Magazine Of Motion Picture Photography And Production Techniques





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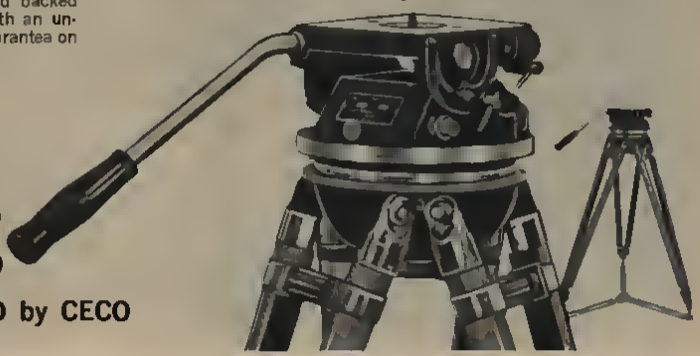

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June, 1962 **Vol. 43, No. 6**

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ON THE COVER

THE DOLLY-MOUNTED camera in a pull back shot captures poignant moment when Burt Lancaster experiences the fright of long walk to his penitentiary cell in scene for "Birdman of Alcatraz" photographed by Burnett Guffey, ASC. (See story on page 354 this issue)

AMERICAN CINEMATOGRAPHER, established 1920, is published monthly by the A. S. C. Agency, Inc., 1782 N. Orange Dr., Hollywood 28, Calif. SUBSCRIPTIONS: United States and Canada, $4.00 per year; Foreign, including Pan American Union, $5.00 per year. Single copies 35 cents; back numbers 45 cents; foreign single copies, 45 cents; back numbers, 55 cents. Advertising rates on application. Copyright 1962 by A. S. C. Agency, Inc. Second class postage paid at Los Angeles, California.

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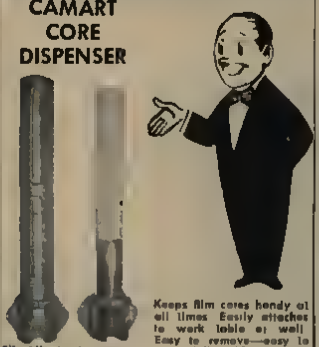

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INDUSTRY NEWS

News briefs of industry activities, products and progress

BRIGHT, NEW facade for General Film Laboratory in Hollywood, part of recently completed additions to its growing west coast plant

General Film Labs Exponds

General Film Laboratories last month opened and put into operation a quarter-million dollar addition to its Hollywood plant.

Included in new wing are 13 negative cutting rooms and a new reception area. Plant expansion, said William E. Gephart, GFL's President, is based on the need for greater total production in both black-and-white and color film. Also, the new type equipment installed will enable company to maintain uniform high quality at higher processing speeds. General, a division of Pacific Industries, provides complete processing and printing service for professional producers of 35mm and 16mm films.

•

Tutwiler on Second Round of Golf

Tom Tutwiler, ASC, last month started shooting the second of the Shell Oil sponsored "Wonderful World of Golf" TV film series in 35mm Eastman Color. Assignment takes him roving the world over wherever golf is played, to shoot the top pros playing on foreign courses and tournaments.

•

New Special Effects Printer

Precision equipment introduced in Hollywood last month makes it possible to create several special effects on a single film. The advantage, as pointed out by the manufacturer, Producers Service Company, is that the special effects technician may now accomplish in a single pass of the film several effects steps. Until now, each re-run of an effects film through processing increased contrast. The new method makes only one processing run necessary.

The equipment will produce a continuous zoom, or follow focus, and automatically maintain constant focus through a range covering a 4-to-1 enlargement to a 5-to-1 reduction. At the same time, the machine may be stopped at any pre-determined footage mark or frame, using the special foot or frame counter. Separately or simultaneously, the operator can "float" a portion of a separate film, or several films upon the finished film through the use of an aerial image projector.

•

Byron Spray Processing

Byron Motion Pictures, Washington, D.C., is now spray-processing all black-and-white 16mm and 35mm film. The process, company says, results in sharper images, improved sound quality in optical tracks and enables company to give faster day and night laboratory service.

•

New Deal For Leon Shamroy

Three-time Oscar winner Leon Shamroy, who presently is directing the photography of "Cleopatra" in Rome, has often expressed privately a desire to direct instead of photograph pictures. Considering his many years behind Hollywood studio cameras, he is well qualified.

Leon Shamroy, ASC

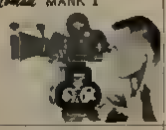
Now, Twentieth Century Fox studio, which has just renewed his contract, is going to make possible his dream come true. New pact calls for Shamroy's services to

Continued on Page 332

*HOW TO SELECT A RECORDER to start your Magnasync-Magnaphonic Sound System

MAGNASYNC Magnaphonic SOUND SYSTEM

Sound Equipment Checklist

		SPLIT 16 MM FILM	16 MM FILM	17½ MM FILM	35 MM FILM	REWIND	FOOTAGE COUNTER	POWER AMPLIFIER	MONITOR SPEAKER	TORQUE MOTORS	PLUG-IN AUDIO	PUSH BUTTON CONTROL	REMOTE CONTROL	SLIDE WIRE POTS	FILM MONITOR	SYNKINETIC MOTION	PLUG IN HEADS	STEREOPHONIC
Nomad MARK I 	A versatile 7 lb professional quality recorder/reproducer all transistorized and positively sprocket hole interlocked with your 16mm camera or projector CANNOT GET OUT OF SYNC! Can be hand held or tripod mounted Wide selection of accessories available **Basic System $675**	X													X	X		
Nomad MARK II	The 12-lb featherweight Mark II a professional double system recorder/reproducer is completely transistorized, self-contained and highly reliable with maximum recording qualities and operating economy Power consumption is only 20 watts **From $925**	X				X									X	X		OPTIONAL
X 400	When lightweight portability is a must the 27 lb X-400 Type 1 is the answer! Another reason so many producers choose this machine is that it is genuinely professional, and yet, surprisingly economical! **From $985**		X			X	OPTIONAL	OPTIONAL	OPTIONAL						X	X	OPTIONAL	
TYPE 1	The Type 1 is a miniaturized version of the Type 5 Low power consumption and extreme portability has made this 38 lb unit a popular selection for remote location production by leading professional motion picture studios **From $1430**		X	X		X	X	X		OPTIONAL		X			X	X	OPTIONAL	
TYPE 1S	The X 400 Type 1S is designed for the man who wants everything in one case playback amplifier monitor speaker, footage counter and torque motors You can be proud to have this machine represent you on any sound stage! **From $1385**		X			X	X	X	X	X					X	X	OPTIONAL	
TYPE 5	The most popular magnetic film recorder in the world is the Type 5! With this unit and all its operational conveniences you are definitely in the "major league" The Type 5 owner always starts his pictures with a special feeling of confidence in the realization that he has allowed no compromise in the selection of equipment **From $1838**		X	X	X	X	X	X	X	X	X				X	X	OPTIONAL	OPTIONAL
MARK IX	There is nothing on the market that compares with the remarkable Mark IX This unit is in a class by itself with push-button remote controlled relay functions plug in audio elements and all the "extras" that make for flawless recording under the most adverse conditions **From $2145.**			X	X	X	X	X	X	OPTIONAL	X	X	OPTIONAL	X	X	X	X	X

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INDUSTRY NEWS

Continued from Page 330

studio as a "cameraman and/or director and/or producer."

•

Birns & Sawyer In Seattle

Birns & Sawyer Cine Equipment Co., of Hollywood has established its first branch office in Seattle, Washington, at 117 Warren Ave., North. Branch will be known as Birns & Sawyer—Northwest and will be managed by Elliott Vineberg, formerly manager of Glazer's Camera Shop in Seattle. The B&S branch will stock all equipment items now available from its Hollywood office.

•

Bill Daniels On Academy Board

ASC president Bill Daniels, last month, was elected to the Board of Directors of the Academy of Motion Picture Arts & Sciences. Along with incumbent Hal Mohr, he will represent cinematographers in the Academy.

•

Mitchell Camera Rep Moves

Charles (Chuck) Austin, former New York representative for Mitchell Camera Corporation, has been transferred to the company's home office in Glendale, Calif., where he will head the company's Sales and Product Development departments.

•

Calendar of International Film and TV Events

If you are a film maker who has on occasion wanted information on upcoming motion picture film festivals throughout the world, a Calendar of International Flm and Television Events is regularly published with supplements by the International Film and Television Council whose headquarters is 26, Avenue de Segur, Paris, France.

A supplement of the 1961 Calendar has just been published by the Council which gives information on all film and television events scheduled in various countries from September 27, 1961 to and including June 9, 1962.

In addition there is a comprehensive Index of Organizers which lists the person or persons (and their addresses) to whom you may inquire for specific details about events in their respective countries. Price of the supplement is 3 shillings, or 40 cents U.S., or 2.00 N.F., or 300 Lire—depending on where you live. ■

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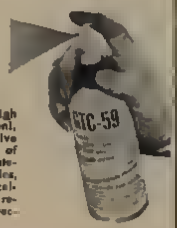

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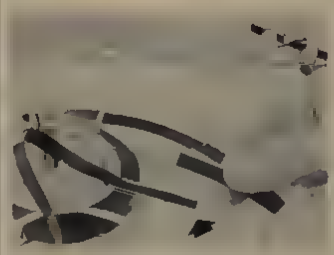

NOVEL THREAD-EASY reel features Eastman Kodak's new magnetic sound recording tape. Reel has built-in splicing aid (arrow). Inset diagram shows how razor blade is used to cut tape for splicing.

A HIGH QUALITY, exceptionally uniform magnetic sound recording tape has been announced by Eastman Kodak Company. Introduction of Kodak Sound Recording Tape marks the company's entrance into the audio tape field. Recordings may be either monophonic in 1, 2, or 4 tracks, or stereophonic in 2 or 4 tracks, depending on the recorder with which it is used.

An unique Thread-Easy reel is almost self-threading. All the user has to do is drop the tape in the slot and rotate the reel without holding the tape. The tape, in 1200 and 1800-foot lengths, is on 7 inch reels. Tape on 3 and 5 inch reels is also available.

Packaged in a convenient one-piece box with instructions printed on the inside of the box, Kodak Sound Recording Tape is protected by a dust proof polyethylene bag. A form for recording date is printed on the back of the box. This form is duplicated on a full size gummed label to permit revision of recording data.

The Thread-Easy reel is precision molded in one piece for maximum accuracy and stability. Both flanges have a radial slot for easy threading and a recessed splicer for on-the recorder splicing. Each reel flange has an index scale for locating recordings and matte write-on panels.

The ¼ inch wide tape is coated on the same triacetate base as Kodak films having sufficient stability to achieve archival permanence. This means it must have the stability to last 1,000 years in storage. The tape comes in a 1½ mil thickness for standard playing time, and in a 1-mil thickness for 50 per cent playing time from the same-size reels.

Lubrication of both the base and the oxide recording layers is combined with precise slitting to provide smooth transport and precise tracking in tape recorders.

The uniformity of the base and coating from roll to roll is especially high. Commenting on tape uniformity and some of the ways it is achieved, Dr. Fred Kolb, of Kodak's Division of Manufacturing Experiments, said:

"Tape uniformity is the dependable consistency from one unit of product to another. This, of course, must be built upon the control of individual units, with each roll of tape inspected and checked to be sure it meets specifications in every one of the essential properties. The base, a little thinner than cigarette paper, must be made of constant thickness and of uniform properties. On this base the recording layer, only one quarter the thickness of a blonde human hair, must itself be constant in thickness with a tolerance of less than 14-millionths of an inch."

A magnetic recording *film* manufactured to the same rigid specifications employed in the production of Eastman motion picture film has also been announced by the Eastman Kodak Company.

Currently under trade trial in the industry, the new magnetic film is being released in 35mm and 16mm sizes. Eastman Magnetic Recording Film is expected to find wide application throughout the motion picture, broadcast, and recording industries.

Close contact was maintained with sound recordists in Hollywood and throughout the country during the research and development stages leading up to the current introduction of Eastman Magnetic Recording Film.

Sales of Eastman Magnetic Recording Film will be handled by the W. J. German Company. The product is now available in 35mm x 1,000-foot rolls. It is also available in 16mm x 1,000-foot rolls and 16mm x 1,200 foot rolls.

Eastman Magnetic Recording Film will also be offered in 17.5mm widths, at a future date.

Scaled for portability!

There's not an excess ounce anywhere on the Arriflex 16... because this professional motion picture camera was designed to **handy** proportions. When you film with it, your hand can be as quick as your eye. It's a classic achievement in portability!

Yet it embodies today's most desired and widely imitated motion picture camera feature—**the Arriflex mirror-reflex shutter.** What's more, it is the only professional camera under $2,000 with a **registration-pin film movement.** It is part of a precision-engineered system—which includes interchangeable magazines, sound blimps, motors, time-lapse and other special-purpose equipment.

Here's how the Arriflex 16 earns its lightweight title. The basic camera, 5 lbs. 14 oz. Add a variable-speed electric motor, and you've added only 20 ounces. Complete with three typical lenses, the ready-to-film Arriflex outfit scales just over 8 lbs. It travels light and compact in the Arriflex 16 "A" case, designed to fit under your airplane seat... to save you waiting time and freight charges. It's a true money-saving **portable!**

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HOLLYWOOD BULLETIN BOARD

Candid camera glimpses of ASC members and guests at Society's recent dinner-meetings

APRIL MEETING

NEWLY ELECTED officers were installed at the April dinner of the American Society of Cinematographers. Officiating at installation ceremonies was Jimmy Durante, pictured in photo above left with President-elect Bill Daniels (R) and John Seitz (in center photo). Durante installs Hal Mohr, recently elected 1st Vice-president of the ASC. Durante and his longtime partner Eddie Jackson later entertained ASC members (photo above, right) with some of the dance, song and comedy routines that have made them famous.

APRIL MEETING

DURANTE, in photo above left, demonstrates to waitress how Eskimos kiss by rubbing noses. Charlie Bonn, executive with W. J. German, Inc., New York (center photo) was visitor, renewed acquaintance with Sam Leavitt (C) and Lester Shorr. In behalf of members of the Society, Bill Daniels presented veteran ASC member John Seitz with engraved gold money clip (photo above, right) commemorating ' service(rendered the Society during his 41 years membership." Seitz is a past president of the ASC.

MAY MEETING

THE ASC's May dinner-meeting featured technical demonstrations of Eastman Kodak's new color negative and print films, also Sylvania's new Sun Guns. Seated at speakers table (photo above, left) are, from left, Arthur Edeson, Sylvania's Buss Berdan, E.K.'s Vaughn Shaner, E.K.'s John Weiner, Hal Mohr and Sol Halprin. A distinguished visitor was British screen director Guy Green (2nd from left, center photo) who directed "Diamondhead," photographed by Sam Leavitt (L). Interested listener is Harry Stradling. Hal Mohr (center, far right photo) displays interest in diffusing screen mounted on Sylvania Sun Gun. Others, from left, are Ben Norwood, Buss Berdan and Fred Mandl.

ASC FOOTNOTES.—The Society, last month mourned the passing of its veteran member *Mack Stengler*, 67, who died May 27 of a coronary at Valley Hospital. During the past three years Stengler had directed the photography of the "Leave It To Beaver" TV series. He was for years a top cinematographer at Monogram Studios and was one of the first to photograph films for television. His widow and two brothers survive . . . *Charles Lang*, last month, was signed by 20th Century-Fox to take over the photography of "Something's Got To Give," Marilyn Monroe starrer, following bow-out due to illness of *Franz Planer*. Latter is presently in Queen of Angels Hospital, Los Angeles. ■

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WHAT'S NEW

IN EQUIPMENT, ACCESSORIES, SERVICES

ColorTran Converter

Natural Lighting Corp., 630 So. Flower St., Burbank, Calif., announces its ColorTran Mark II power converter for use with ColorTran lighting equipment. It features split-load input to accommodate a single 30 amp AC power source or two individually fused 15-amp. sources to boost ordinary 120-volt lamps to produce photographic illumination of either 3200° K or 3400° K, as desired. Recessed push button control panel provides integral safety lock, permitting "warm-up" of lamps prior to "boost" operation. A compact 5½" x 8¾" x 11" in size, the unit weighs 33½ lbs., lists for $120.00.

Automated Film Printers

Bell & Howell Company, Chicago, Ill., announces a new series of automated additive color film printers designed to provide improved color balance and quality to motion picture prints. Available for any width film, from 16mm to 70mm, printers are capable of making extremely short scene-to-scene color corrections at high speed, and afford color correction with 72 variations as compared to 31 of old model printers. Controlled by pre-punched program tape, machine prints from a color negative or color inter-negative onto a color positive at speeds up to 180 feet per minute. Light from a single 1000-watt lamp is split into red, green and blue components by selective reflective mirrors.

New Arri-16 Lenses

Arriflex Corp. of America, 257 Park Avenue South, New York 10, N. Y., announce a new series of three Zeiss Planar lenses for the Arriflex 16 camera, in focal lengths of 16mm, 25mm, and 50mm. Said to produce ultrasharp, exceptionally crisp pictures, the 50mm is rated at f/2, the 16mm and 25mm at f/2.2. Lenses are calibrated in both feet and meters. List price is $225.00 each.

Varied Voltage Control

Industrial Timer Corp., Newark, N. J., announces a portable, adjustable AC power supply that provides a range of output voltage from 1 to 140 volts. Model VVS consists of a variable transformer capable of controlling loads up to 5 amps, voltmeter input line and output receptacles large, easy-to-read voltmeter and front panel control knob. List price is $55.00.

Quartz Lamp Unit

Novatech Corp., 282 Seventh Ave., New York 1, N. Y., announced last month its Nova Twin set-lighting lamp which incorporates two quartz-iodide lamp units as light source. Latter may be had for 3200° K or 3400° K illumination. Light intensity at 10 feet is rated at 500 foot candles, and power consumption at 1250 watts. A two position switch provides low and high illumination light levels. The

Continued on Page 345

NEW!

THOMAS 16

FLUID PAN HEAD

guaranteed superior . . . in every way

This exciting new fluid head assures you professional excellence wherever you go, whatever your subject. Super-smooth floating action performs beautifully with 8 & 16 mm cameras & accessories. Only $149.50.

Guaranteed superior—return head within 10 days for a full refund, if not highly pleased.

READ THIS P.M.I. REPORT!

Tells why P.M.I. thinks the Thomas 16 superior!

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QUICK DETACHABLE PLATE AVAILABLE

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Gentlemen: Please rush me complete details about the Thomas 16.

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PMI
PHOTO METHODS FOR INDUSTRY
here's what PMI
says about the
THOMAS 16 fluid
pan head

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A FREE LANCE MEDICAL PHOTOGRAPHER REPORTS:

"In conclusian, then, I think thot this fluid pan head offers certain distinct advantages aver other heads. It shauld prave itself to be o valuable piece of equipment to the 16mm filmer."

Read the complete unsolicited article from the February 1962, Volume 5, Na. 2 issue af PMI ond then give the THOMAS 16 yaur persanal test. Prove far yaurself that the THOMAS 16 will give yau quolity unsurpassed by any other pon ar tilt equipment. Try it far ten doys. If for any reasan you ore nat completely sotisfied, return it for on immediate refund (including shipping).

TA Mfg. Corp. 4607 Alger Street Los Angeles 39, Calif

- Super-Smooth Floating Action
- Positive Brakes
- Voriable Tension Control

IN-PLANT TEST

A PAIR OF WORKING PHOTOGRAPHERS TELL YOU WHAT THEY THINK ABOUT 2 NEW PIECES OF MOTION - PICTURE EQUIPMENT AFTER PUTTING THEM THROUGH THEIR PACES IN ON-THE-JOB TESTING

for feature [illegible], nothing to compare with

THOMAS 16

fluid pan head
[illegible]
cinematography & TV

out of this world! a new concept for the smoothest panning and tilting action ever . . . plus a revolutionary new positive braking system! it's the exciting THOMAS 16

incorporates a new concept in fluid technology

THOMAS 16 will out-perform anything on the market today. Exclusive balanced, free floating action assures you of smoother, steadier 360° pans and tilts even when cumbersome telephoto lens and heavy professional cameras are required. Extreme temperatures —60° to more than +212°F, altitudes and other extremes pose no problem to the easy, efficient operation of the THOMAS 16

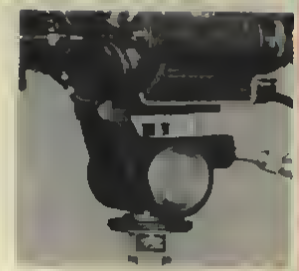
look at these features:

- **Super-Smooth Floating Action**
- **Positive Brakes**
- **Variable Tension Control**

- **Absolutely No Back-Lash**
- **Adjustable Telescoping Pan Arm**
- **Controlled Fluid Drag Preset at 10 Inch/lb on Tilt, 7½ Inch/Lb Panning.**
- **All Aluminum Construction, Weighs Only 3½ Lbs.**

[illegible]
[illegible]
[illegible]
LOS ANGELES [illegible] CALIFORNIA

THOMAS Pan Head



Specifications: Thomas 16 pan head. Manufactured by the TA Manufacturing Corp., Cinema Products Division, 4607 Alger Street, Los Angeles 39. Adjustable tilt tension and lock at any angle without disturbing tension control. Controlled fluid drag preset at 10 inch-lb. on tilt; 7½ inch-lb. on pan. Double-mounted tilt barrel. Professional thread adapter to convert from ¼-20 thread to ⅜-16 thread. Right-hand controls. Adjustable-length pan arm. Spring-loaded camera screw. All-aluminum construction. Weight: three-and-one-half pounds. Price $149.50.

Donald Wong, free-lance medical photographer, reports: I found the construction of the head to be of high quality and compact design and would expect quite a bit of rugged use from it. The padding on the top of the head became torn a bit by removal of the cameras at the end of a session, but to me this is a minor point. The head is fixed easily onto any standard tripod sturdy enough to hold any 16mm movie camera or 4 x 5 studio camera. For photographers who do an equal amount of still and motion picture photography, this is an important economy measure. It eliminates the need for having to carry another, heavier tripod.

I found the action to be very smooth under all the conditions in which I used the head. Perhaps the feature which impressed me most is the placement of the two control knobs, the horizontal and vertical locks. I found that having these controls both on the right side of the head, as opposed to having one in front and one on the same side as the pan arm, or some such combination, was much more convenient and efficient. This arrangement, in combination with placement of the (adjustable) pan handle on the left side of the head, allows much smoother operation. Although the knobs are placed concentrically, operation of one does not interfere with operation of the other, that is, unlocking one does not cause the other to unlock. The knobs are knurled and of fairly good size, thus giving a big area for the hand to grip.

Once the head was locked, I found absolutely no slipping no matter at what angle the camera was held. This was true even with long telephoto lenses on the camera.

A 16mm Arriflex movie camera with standard and 100mm Zoomar lenses was used in the tests. In addition, a 4 x 5 Sinar studio view camera was placed on the head. In this latter case, the head really proved its value, especially when long bellows extensions were used and small changes had to be made in the position of the camera. The shifts were made easily and the camera locked back securely in its new position.

In conclusion, then, I think that this fluid pan head offers certain distinct advantages over other heads. It should prove itself to be a valuable piece of equipment to the 16mm filmer.

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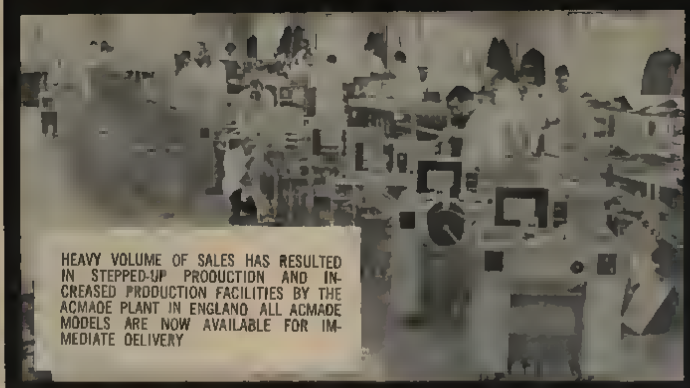

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This moderately priced splicer incorporates new precision features which insure absolute accuracy and safety in splicing. Three models are available: Model 16 16mm, Model 35 35mm, Model 35-16 combination 35mm. and 16mm.

1. The combination 35mm-16mm Model features retract table 35mm and 16mm pins. This permits center placement of the 16mm pins for A and B roll splicing.

4. Specially designed right hand pressure block permits easy and accurate back-scraping on all models.

5. Tempered steel springs provide perfect pressure positioning film firmly during scraping and splicing processes.

2. Stainless steel blocks are precision fitted with Tungsten-Carbide inserts for cutting. Cutting edges will remain sharp and last forever.

3. Attached scraper adjustable for depth — fitting jig incorporated on splicer base.

6. Thermostatically controlled heater maintains constant 100° temperature.

Model 16 — $299

Model 35 — $299

Model 35-16 — $399

ACMADE MARK II EDITING TABLE

Makes Editing Easy!

$2975

f.o.b. New York

Operation of this simple, efficient editing machine can be mastered in minutes. Continuous (non-intermittent) movement provides absolute protection for your film. Instant controls and declutching allows up to 50% greater speed for pic & sound editing. All combinations of 16mm and/or 35mm channels, pins, magnetic and optical sound available.

WRITE FOR DETAILED BROCHURE

Acmade Foot-Operated Splicer with Tungsten Tipped Blades

Combination
16mm-35mm
Model

$1495

This splicer is constructed, as is usual with ACMADE products, of the finest materials and workmanship. All castings are of the best quality and the top body and cutter arms are seasoned to prevent distortion after machining. The machining is carried out to limits of ± .0005" in order that the cutter blades shall close in a dead parallel manner. The cutter blades are made from stainless steel with Tungsten Carbide inserts and afterwards ground lapped and polished to a limit of ± .0002" thickness and the cutting edges relieved by 1°. The Tungsten Carbide inserts will have indefinite life and will not require sharpening as with other types. A heater unit is installed in the top body of the machine. The top light in a well glass fitting is attached to the body of the machine and also an inspection light in the waste bin together with cement bottle and brush. A scraper block is supplied and also a scraper block setting jig and support shell rubber-covered. The whole machine is finished in first quality grey hammer end all metal parts other than cutter blades are hard flash chromed.

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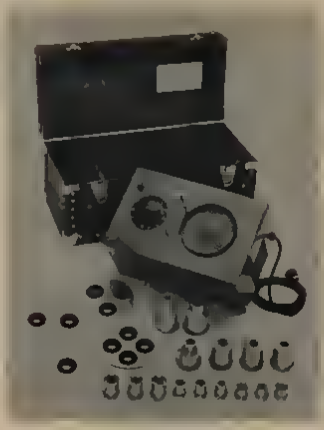
WHAT'S NEW

Continued from Page 338

unit is 7" x 9" x 6" in size, weighs 3½ lbs., the collapsible stand extends to 9½ feet and collapses to 31 inches. Barn doors are available, also kits containing 2 Nova Twins, stands and carrying case.



Sound Effects Maker

Mole Richardson Co., Hollywood 38, Calif., has added the Windhowler to its Moleffect line. This machine will produce sound effect of such wind noises as moaning, hurricane, desert, mountain, whistling, winter, forest, weird, ships rigging, and shrill as well as other similar types of sounds, including that of a jet engine. These effects are produced through various combinations of resonators, shown in the picture, inserted in discs with the proper number of holes.

The Windhowler may be used "live" on stage, or as a means for recording the special effects of desired sounds on tape for later use. One of the advantages of "live" use is the ease with which a desired sound may be cued directly to the action on stage. A rheostat provides means of adjusting sound to the desired level.

Splicing Tape

S O S Movi-Mylar is a transparent sprocketed adhesive tape for splicing and repairing motion picture film and magnetic tapes, regardless of the base material. It can be applied by hand or tape splicer, and does not diminish the light transmission of spliced frames. Available in 16mm, 17½mm and 35mm clear or white in 66-foot rolls. The 35mm is priced at $11.00 per roll, the others at $6.00. Distributor is S.O.S. Photo-Cine-Optics, Inc., 602 W. 52nd St., New York 19, N. Y.

Oxberry Optical Printer

A new Oxberry optical printer (1500 Series), designed for high-precision optical step printing and special effects work and priced at $12,900, is announced by Animation Equipment Corporation, 38 Hudson Street, New Rochelle, N. Y.

The 1500 unit will handle frame-to-frame and continuous step projection printing, freeze-frame work, in color and black-and-white. Zoom range is from 5 diameters reduction to 4 diameters enlargement. Both camera and projector will receive 35mm and 16mm components without loss of optical centers when changing film size. Electro-mechnaical drive has push button controls.

Standard model printer for 35mm includes camera with manual dissolve and fade, 35mm shuttle and sprocket assemblies, automatic take up, 400 ft magazine, counters, viewing device, precision lens mount, 100mm f/4.5 lens, two-speed stopmotion motor that operates continuously forward and reverse.

Film transport mechanisms are interchangeable to accomodate 35mm and 16mm in one housing which remains in place to maintain precision alignment. A new tilting device aligns a scene precisely without distortion.

Gyro Head & Tripod

Florman & Babb, Inc., 68 W. 45th St., New York, announces distribution of Sachtler & Wolf double gyro heads and tripods. Models are available for 16mm and 35mm cameras. Maximum tilt is 180°, panning, 360°. Tilt and Pan action released by separate levers. Tripod is sturdy, lightweight. List price is $795, including case. ■

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OF PHOTOGRAPHIC LIGHT IN THE NEW INDUSTRIAL MOTION PICTURE KIT

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Components of the kit have been selected to provide the utmost in wide flood illumination plus key lighting requirements Full duty cycle ColorTran converters dependably power the entire system via 3-wire safety-grounded cables, while drawing a total of only 73 amps from any 220 volt AC source. Yet, the unique "split-load" input features instant full load operation from 110 volt sources without modifications, in cases where 220 volt power is not readily available

Total weight including cases is less than 250 pounds and this includes all 8 lights, 8 stands, 2 converters, Gaffer Grips, etc Get the full story now. Send for illustrated literature which also details available accessories and extra long run cable kits

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BEHIND THE CAMERAS

WHAT THE INDUSTRY'S CAMERAMEN WERE SHOOTING LAST MONTH

By MARION WHITNEY

NOTE Asterisks following titles indicate television film productions

BILTMORE STUDIOS — NY

JACK PRIESTLY, "Naked City"* (Screen Gems).

BIOGRAPH STUDIOS — New York

GEORGE STOETZEL, ASC, "Car 54 Where Are You?"*,

COLUMBIA STUDIOS

DOUGLAS SLOCOMBE, "The L-Shaped Room" (Romulus Films, Ltd., shooting in England) with Leslie Caron and Tom Bell James Woolf, director.

JOSEPH BIROC, ASC, "Bye Bye Birdie" (P'Vision; Eastman color) with Janet Leigh and Dick Van Dyke. George Sidney, director.

WILLIAM WHITLEY, ASC, "3 Stooges in Orbit" with 3 Stooges and Edson Stroll Edward Bernds, director

SAM LEAVITT, ASC, "Diamond Head" (P'Vision; Eastman color, shooting in Hawaii) with Charlton Heston and Yvette Mimieux Guy Green, director

JACK MARTA, IRVING LIPPMAN, "Route 66"*

CHARLES WELBORN, "Dennis the Menace"*

FRED GATELY, ASC, "Hazel"*.

GERT ANDERSEN, ASC, "Donna Reed Show"*.

FRED YOUNG, "Lawrence of Arabia" (Super P'Vision; Eastman color, Horizon Pictures (GB); Columbia release, shooting in Spain) with Alec Guinness and Anthony Quinn David Lean, director

DESILU—Culver City

CHARLES STRAUMER, "The Untouchables"*.

DESILU—Gowar Studios

ROBERT HAUSER, "Kraft Mystery Theatre"*

WALT DISNEY PRODUCTIONS

EDWARD COLMAN, ASC, Son of Flubber" with Fred MacMurray and Nancy Olson Robert Stevenson, director

FILMWAYS — MGM

HAL MOHR, ASC, Commercials*.

TOM TUTWILER, ASC, "Shell's Wonderful World of Golf"*

FILMWAYS—New York

MORRIS HARTZBAND, "The Defenders"* (CBS) Boris Sagal and Buzz Kulick, directors.

GOLDWYN STUDIOS

TED MCCORD, ASC, "Two for the Seesaw" (Mirisch Robert Wise, Seven Arts Prod., P'Vision) with Robert Mitchum and Shirley MacLaine Robert Wise, director

INDEPENDENT

FELIPE SAKDALAN, "To Be a Man" (C'Scope, shooting in Philippines) with Van Heflin and Rita Moreno Irving Lerner, director

CARSON DAVIDSON, "The Flesh Eaters" (Vulcan Prods. shooting in New York) with Martin Kosleck and Barbara Wilkin Jack Curtis director

EDMOND SECHAN, "Grand Duke and Mr Pimm" (Oxford Prods.; P'Vision Color; shooting in Nice) with Glenn Ford and Hope Lange David Swift, director

PAUL W PUCKETT, "Lusitania" Roll Mac Prod color) with Paulann Hudson and Dave Morgan David McClellan, director.

KEYWEST STUDIOS

FRED WEST, ASC, (Family Films) Series of Religious pictures.

METRO-GOLDWYN-MAYER

JOSEPH RUTTENBERG, ASC, "The Hook" with Kirk Douglas and Nick Adams. George Seaton, director

PAUL VOGEL, ASC, "Period of Adjustment" with Anthony Franciosa and Jane Fonda. George Roy Hill, director

GEOFFREY UNSWORTH, "The Main Attraction" (Seven Arts Prods.; C'Scope Eastman Color, shooting in London) with Pat Boone and Nancy Kwan Daniel Petrie, director

MILTON KRASNER, ASC, "How the West Was Won" (MGM-Cinerama Prod., Cinerama and MetroColor, Episode 5) with John Wayne and Debbie Reynolds Henry Hathaway, director.

GUNTHER SENFTLEBEN, "Captain Sindbad (Technicolor. King Bros Prod., shooting in Munich) with Guy Williams and Heidi Bruehl Byron Haskin, director

WILLIAM DANIELS, ASC, "Billy Rose's Jumbo" (Euterpe Prod; C'Scope & Metrocolor) with Doris Day and Stephen Boyd Chuck Walters, director

PARAMOUNT STUDIOS

HASKELL BOGGS, WALTER CASTLE, ASC, Bonanza"*

ARTHUR ARLING ASC, "My Six Loves" with Debbie Reynolds and Cliff Robertson. Gower Champion, director

LOYAL GRIGGS, ASC, "Girls! Girls! Girls!" (Hal Wallis Prod., color; shooting in Hawaii) with Elvis Presley and Stella Stevens Norman Taurog, director

W WALLACE KELLEY, ASC, "It's Only Money" (York Picts., Jerry Lewis Pictures Corp.) with Jerry Lewis and Joan O'Brien Frank Tashlin, director

FRANK PHILLIPS, "Have Gun Will Travel"*.

PARAMOUNT SUNSET STUDIOS

FLEET SOUTHCOTT, "Gunsmoke"*

PRODUCERS STUDIOS

RAY FOSTER, Commercials*

REPUBLIC STUDIOS

GEORGE DISKANT, ASC, "The Law and Mr. Jones"*

REVUE STUDIOS

ROBERT BURKS, ASC, "The Birds" (Alfred Hitchcock Prods.; shooting in Santa Rosa) with Rod Taylor and Jessica Tandy. Alfred Hitchcock, producer director.

Continued on Page 386

in the east . . . it's

MOVIELAB

for color* and black & white

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Q & A

Technical Questions and Answers

Q.—*Can any tape recorder having a synchronous motor (7.5 ips) be used in conjunction with a camera that is synchronous at 24 fps to obtain a re-recorded optical track from the tape for lip sync printing?*—R. B. Kingsport, Tenn.

A.—Genuine lip-sync cannot be obtained by the method you describe, chiefly because of the tendency of quarter inch tape to stretch both in use and in storage when it is wound too tight.

True lip-sync is best achieved with a tape recorder and camera through use of a synchronizing device, such as the Ryder Echelon sync head, mounted on the camera, plus the use of a top quality recorder. The Ryder device generates a sync signal which is recorded on the tape simultaneously with the picture sound. The signal serves to maintain sync between tape and picture in the re-recording step.

Q.—*Soon after I purchased an incident light meter, I ran across a data sheet on films issued by Eastman Kodak Co., which states as follows:*

"Caution: The settings indicated by incident light measurements may lead to excessive exposure when the subject is flatly lighted. In such cases, the indicated exposure may be cut in half—or even more—if the settings lead consistently to dense negatives."

The data sheet referred to pertains to black-and white panchromatic films. Can you explain the reason for this precaution, inasmuch as nothing like this is stated in the meter instruction book.—B. J. C., Shreveport, La.

A.—You have raised an interesting point. At the time the Norwood 3-D incident light meter was introduced, other manufacturers promptly announced so-called incident light meters. Not all these manufacturers fully understood the design requirements for a meter that would take into account the very important 3-D factor of illumination. As a result a number of so-called incident light meters placed on the market gave results which may have prompted the precautionary note stated in your letter.

A true 3-D incident light meter, one that has a hemispherical light collector, will render correct readings for front light, side light or back light.

Q.—*I have just acquired a GSAP 16mm magazine "gun" camera. What voltage is required to drive it? Where can I purchase power plug for same? Also I plan to use this camera in an underwater housing and therefore wish to know if it will operate on batteries.*—R. M. P., Tampa, Fla.

A.—The GSAP cameras operate on either 12 or 24 volts DC, depending on the model and the manufacturer. The power plug you require may be purchased from Gordon Enterprises, 5362

Continued on Page 350

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With the Mitchell on a location set-up are, left to right: Ronald Thompson (TV executive, Walker Robertson Maquire), Dennis Trewin and John Atkinson.

Mitchell camera set up on car platform for photographing early morning scenes at the Volkswagen (A'Asia) plant at Clayton, Victoria. Shown are Atkinson, Trewin and Thompson.

Chief cameraman John Atkinson with Mitchell lined up on actress Rhonda Christansen.

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QUESTIONS & ANSWERS

Continued from Page 348

No Cahuenga Blvd., No Hollywood, Calif If the camera you have is a 24 volt model, it can be operated on 18 standard flashlight batteries

Q.— *My problem is how make combination or superimposed titles on Kodachrome that will look professional What is the correct method for doing this so the lettering will be clear and sharp and not show any of the moving background through the letters "ghost-fashion?*—C G. H , Seattle.

A.— The most common and perhaps the most satisfactory way of producing titles on Kodachrome is to photograph art for the background with an overlay title done on thin transparent material, using reflected light for exposure

Still another method is to place the title text on glass, which is set up before the camera in the foreground, with either a transparency or photographed scene in the background Here excellent balance of exposure is required between both mediums

Where prints are to be made from the original Kodachrome the common practice is to combine the titles separately photographed with the print or the title background by means of A & B printing

Q.— *What is the most satisfactory method for utilizing stereo color transparencies or 35mm color slides as pictorial backgrounds for titles, double exposing the title text over same?* — W A. C., Duluth, Minn.

A.— Best method is to utilize a simple rear-projection set up. For this you will require besides a slide projector, a panel of matte-surface acetate about 11" x 14" for your rear projection screen Set this up in a solid upright frame.

First photograph the title text, composed of white letters on black backgrounds Cap camera lens and wind back film in camera to the starting point. Set up camera before the rear-projection screen so that the lens field of view takes in the entire screen area

Set up the slide projector on opposite side and adjust projection distance and focus until one frame of the stereo pair is sharply focused and entirely fills screen

Now photograph the transparencies using the same film that was exposed for the titles a

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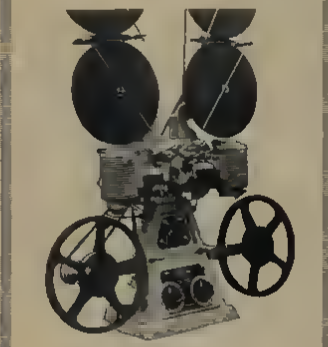

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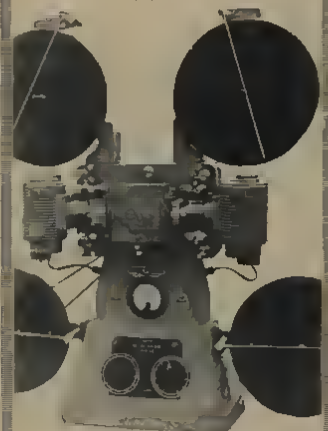

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Thanks to a new Kelvin "fix" on sunlight, more of the impossible is now within the grasp of the professional cinematographer

Such is the wide range of critical exposure measurement under all conditions of light, made possible by new American Standard specifications for exposure meters Prescribing a new calibration at a Kelvin temperature more in keeping with sunlight. the standard obviates the need for reflected-and-incident type meters as well as tungsten speed indexes for most black-and white panchromatic films

Industry-sponsored research by the 24-member PH2 sectional committee. using procedures of the American Standards Association, produced the new specifications of American Standard General-Purpose Photographic Exposure Meters (Photoelectric Type), PH2 12-1961. Manufacturers of film and exposure meters as well as users assisted in the cooperative effort at improving the accuracy, reliability and simplicity of the meters. Chairman of the subcommittee developing the revised standard for photoelectric meters is Allen G Stimson of Eastman Kodak Company while M. G Anderson of Ansco is chairman of the responsible PH2 sectional committee

According to the committee, "impossible" light conditions may be overcome by the cinematographer as a result of increased meter sensitivity and recalibration In this regard, meters manufactured in conformance with the standard will be calibrated at 4,700 degrees Kelvin instead of the 2,700 degrees heretofore used

Research indicated the photographic value of increasing the basic color temperature to a new high of 4,700 degrees Kelvin. this being a measurable step towards insuring foolproof accuracy under all conditions of light sunlight, tungsten and existing light

Although meters calibrated at 2,700 degrees Kelvin function quite satisfactorily under artificial light (since 2,700 degrees favors tungsten rather than daylight color temperatures) there is a considerable chance of error when critical readings are taken in sunlight. particularly at higher color temperature levels. The new specifications provided in the revised standard answer this problem by raising the color temperature calibration to a point where the required accuracy of exposure readings in sunlight and tungsten is achieved

A revision of a standard approved in 1957, the new American Standard now includes both the arithmetic and logarithmic (additive or APEX) systems of exposure parameters, and provides the first complete array of the APEX (Additive system of Photographic EXposure) nomenclature.

Faced with ever increasing film speeds, meter and camera manufacturers have found in the APEX system a happy solution to their legibility problems since, at most, two digit numbers designate the logarithmic speed values while arithmetic speeds may use three or four digits.

Numbers in the arithmetic series are designated ASA speeds while the log series is labeled ASA speed values. In addition, the logarithmic series carries a degree symbol (°) to further distinguish it from the arithmetic series; for example, ASA 9° corresponds to ASA 1600 in the arithmetic series

Copies of American Standard PH2 12-61 are available for $2 00 each from the American Standard Association, Dept. P305, 10 East 40th Street, New York 16, N Y.

Color Film Storage

Ways to minimize dye changes in stored color films were described by Robert O. Gale and Allan L Williams of Eastman Kodak Company at the Los Angeles convention of the Society of Motion Picture and Television Engineers last month.

Improper processing or storage conditions produce different color balance and timing requirements when prints are to be made and even such adjustments in printing may not be able to compensate for dye instability, since film contrasts may also be changed, it was pointed out.

Good dye stability can be obtained by making sure the final wash is free of hypo contamination, washing for the recommended time and at the recommended temperature, maintaining the stabilizing bath at the correct chemical level to assure stabilization of the dyes. and storage of originals and duplicate negatives at 40 to 50 percent relative humidity and 55 degrees F or lower temperature, concluded Gale and Williams. ■

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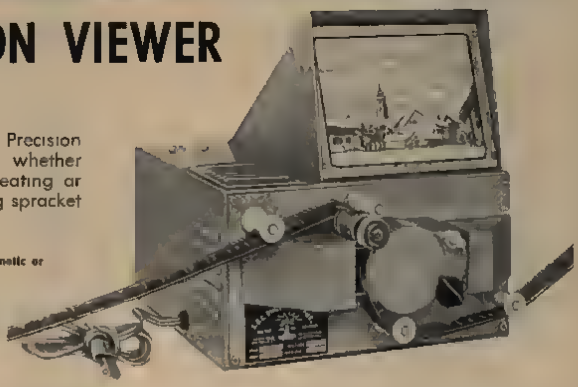

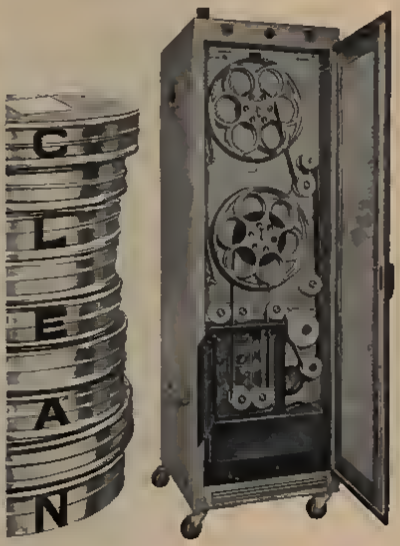

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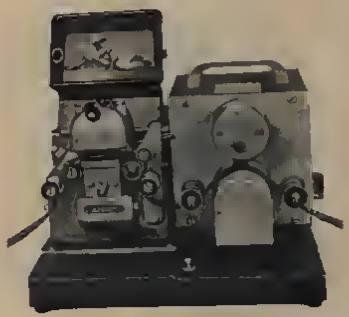

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→ SEE SENSATIONAL BARGAIN OFFERINGS ON PAGES 358 AND 359 ←

Cinematographer Burnett Guffey, ASC, is a strong advocate of "Keep the lighting simple." His techniques are most effectively displayed in his photography of

"BIRDMAN OF ALCATRAZ"

BY HERB A. LIGHTMAN

A STUDY in lighting given tiny prison cell set by Burnett Guffey. Note how subtle illumination is given bird cages in background, creating visual reminder of Stroud's dedication to bird research despite his dingy surroundings

ALMOST THREE-FOURTHS of "Birdman of Alcatraz" was enacted within the confines of a single set barely 6 by 9 feet in size. Needless to say, this posed something of a photographic challenge for the man who directed the photography of the picture—Burnett Guffey, ASC. Not only was the basic area of the set unusually small, but it was crowded with such props as bird cages of numerous shapes and sizes and hundreds of birds, both caged and free. The initial problems, of course, were how to light such a set to attain the pictorial mood the story required, and how to shoot action within it in the variety of camera angles good cinematic continuity demands.

PRODUCTION HUDDLE—Discussing upcoming scene for "Birdman of Alcatraz" on Columbia Studio sound stage are (from left), Harry Sundby, gaffer; cinematographer Burnett Guffey, ASC; John Frankenheimer, director; Richard Kline camera operator; and Burt Lancaster who plays "birdman" Robert Stroud in factual story based on book by Thomas E. Gaddis.

The Birdman of Alcatraz, as many readers will remember, is convict Robert Stroud who has earned world renown for his studies of birds, conducted entirely within his prison cell. Stroud reportedly earned his initial penitentiary stripes for gunning down a man in Juneau, Alaska, years ago for mistreating his girl friend. To date, he has spent 51 years of his life in solitary confinement. During the course of his incarceration he developed an uncommon interest in birds. During the transition from killer to scholar, he has become perhaps the world's foremost scientific authority on birds and their diseases. Not infrequently the Birdman became involved in prison strife that resulted in extending the term of his sentence and ultimately made him a lifer. It is all this which is dramatically portrayed in this gripping United Artists' production filmed in black-and-white.

On the sound stages of Columbia Studio in Hollywood a series of prison sets were erected, authentic down to the last detail. "No concessions were made for the

NOTE HOW the lighting in this scene has been studiously concentrated on various areas and props to point up both the crowded aspect of Stroud's cell and his tender and devoted attention to his birds

RIOTING CONVICTS make shambles of cell block in this scene for "Birdman of Alcatraz." There are two main sources of light here: from the barred windows and from lights in cell block ceiling. Note how both are effectively accented

camera or the lighting requirements," says cinematographer Guffey. "The tiny cell set was constructed according to dimensions of the original. In most shots, three of the walls were visible, leaving but one wall 'wild' for removal to accommodate the camera or placement of lights."

"Since many of the shots here were low angles," Guffey continued, "the ceiling piece had to remain in place most of the time, further complicating our lighting problems. The desired illumination for this set was finally achieved by concealing Juniors, Baby Juniors, and tiny spotlights behind props, etc."

Guffey also achieved a measure of effective camera movement for many of the shots on this set with the camera dolly-mounted and the scope of the camera movement held within strict limits.

Even the multitude of birds used on this set presented problems in the photography—particularly in the sequence where the Birdman, in a drunken rage of frustration, turns hundreds of the birds loose in his cell. It was necessary first to entirely surround the set, including the top, with a wire mesh enclosure to keep the birds confined.

Important to the picture are a number of screen-filling closeups of various birds. Very often such photography — too often considered secondary in importance —is turned over to a second-unit or insert camera crew. But in this case, all such shots were photographed by Guffey and his crew. These closeups required extreme patience to achieve as well as genuine technical know-how.

"Using four-and six-inch lenses on the camera," said Guffey, "our chief problem was obtaining sufficient depth-of-field to keep the birds in focus as they moved about within the limited camera range. We managed it rather easily, however, by using Eastman Double-X film and increasing the set lighting level to 600 foot-candles, which enabled us to shoot at f/11."

Because Director John Frankenheimer favors split-focus compositions, Guffey usually worked at a stop of f/5.6 within the body of the action, often using an 18mm wide-angle lens to gain greater depth and coverage within the small set. A zoom lens was frequently used with great effectiveness in making the bird shots, and in one instance achieved a screen-filling closeup of a tiny canary egg.

Moving to other and larger sets provided the camera crew with much needed respite from the restrictions the tiny Birdman's cell

Continued on Page 394

LONGSHOT view of the cell block set erected on sound stage. Batteries of sel lamps may be seen at right end of set, mounted on suspended parallels. The Mitchell camera is mounted on Chapman crane to provide maximum mobility for shooting the riot action in long, continuous takes

SAUL BASS: "... titles should be provocative and entertaining."

NEW LOOK

Artfully designed titles command attention, put the audience in a more receptive mood for the picture, says Saul Bass who is credited with introducing a

FRAME REPRODUCTIONS from the 2 minute 45 second title prologue for Columbia Pictures "Walk On The Wild Side." Live action scenes of black cat wandering through alley provided novel backdrop for main and credit titles and led audience attention directly into initial scene of picture

WHEN "WALK ON THE WILD SIDE" was previewed for the press in Hollywood recently, an astonishing thing happened. Following screening of the picture's main and credit titles, the critical audience of reviewers responded with enthusiastic applause that was little short of an ovation. It was the first time in memory of veteran film critics that a picture's titles had elicited such response.

When the picture went into general release, its titles captivated audiences, too. Responsible for all this is one of the most imaginative title presentations ever conceived for a motion picture—a sort of prologue, cleverly designed and executed, that grips and holds audience attention and conditions it for the story to come.

As is customary with film presentations today, the title text is given a pictorial or live-action background to play against. In this case it was a drab alley scene through which a black cat wanders. The sequence begins with the camera focused on the open ends of a stack of sewer pipes through which a slinking black cat presently emerges. As he does so, the camera's zoom lens moves in for a tight close-up of its face, eyes sparkling, which serves as background for the main title. Thereafter, the cat moves along the alley, meanders through or around obstacles encountered there, then proceeds through a length of sewer pipe lying parallel to the camera and emerges at the other end to come face-to-face with another cat—a scrawny alley feline, once white, now a dingy grey. A brief but hectic fight ensues that ends almost as quickly as it began, and the black cat continues on, the camera following him to dissolve the scene to the opening scene of the picture. At appropriate moments, credit titles dissolve in and out over the live action which moves progressively across screen from left to right.

Ordinarily, it is a picture's photography which we explore and describe in these pages; but here is a title presentation so provocative and imaginative in concept as to be equally worthy of such treatment. It deserves to be studied for the way it gives special impact to "Walk On The Wild Side." On the screen a brief two minutes and forty-five seconds, it was months in the planning, required three days to shoot and two weeks to edit. It reportedly cost producer Charles K. Feldman $25,000—a sum Hollywood made many feature films for in the good old days of movie making.

Actually this title project was a capsule movie production. It involved planning, staging, lighting and photography comparable to that given a feature

IN FILM TITLES

By FRED FOSTER

completely new concept in film title presentation. His entertaining title prologue for "Walk On The Wild Side" was a full-scale film production in itself.

film. All this, of course, following the initial concept. In the beginning there had to be an idea. This was supplied by Saul Bass—a name that has become synonomous with unique and provocative film titles. A successful industrial designer of international reknown, Bass pursues the production of titles for a picture with an artist's concept of design as it influences eye appeal. He feels strongly that the tendency to longer credit title sequences is wearying to audiences and that picture titles today need new concepts in presentation if they are to command audience attention.

"In spite of all the efforts to control the situation, the list of credits on films grows larger each year," Bass points out. "Yet it is generally recognized that the film-going public is not particularly interested in any of these, with the exception of the leading actors and actresses, and a few well-known directors.

"Since trade requirements demand these extensive credits, it seems that this usually neutral interlude should be converted into a positive introduction to the film. Normally the running of the title is a period during which the patrons leave their seats for popcorn, or simply explore their seats for long-range comfort, and when the film itself begins, there is usually an initial 'cold' period. I have approached the titles with the objective of making them sufficiently provocative and entertaining to induce the theatre inhabitants to sit down and watch, because something is really happening on the screen. It then may become possible to project a symbolic foretaste of what is to come, and to create a receptive atmosphere that will enable the film to begin on a higher level of audience rapport."

After the initial discussion about the titles with Feldman, at which time the black cat was chosen as the key symbol and star of the title prologue, Bass roughed out his initial concept on paper and then interpreted it visually, shooting it with a 16mm camera. Mrs. Bass worked with her husband on this phase of the project which involved the family cat—

Continued on Page 373

THE STAR— Napoleon, professional animal actor and star of the title prologue, became symbol for all advertising and promotion for "Walk On The Wild Side"

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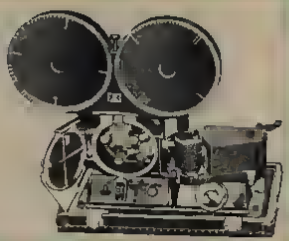

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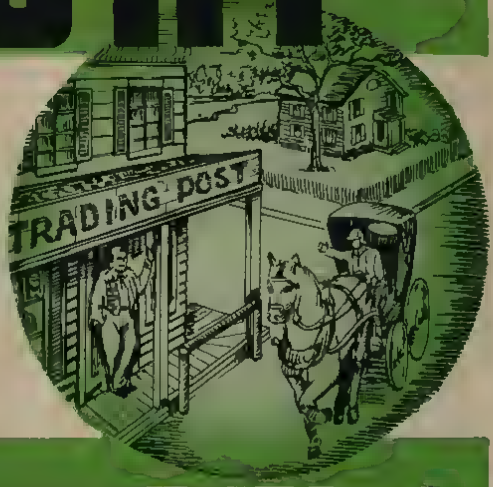

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DUBBING SESSION—As scene loop is projected on screen, voice actors (center) standing before microphone speak dialog in Spanish, matching near as possible lip movements of actors on screen

GROUP OF MEXICAN actors study run through of a film loop to be dubbed to acquaint them with action, timing, voice inflections, etc., before actual dubbing begins

Spanish Voices For Hollywood's TV Films

How actors in Hollywood TV films are given Spanish voices thus widening the market for such films in Latin America.

By DARRIN SCOT

THANKS TO THE highly-perfected techniques of foreign language dubbing, much of Hollywood's vast output of television films is being seen in foreign countries. One of the principle markets for these films is the growing Latin-American TV audience. To convert these films so they are understandable to the Latins, the entire soundtrack must be revamped with the dialogue in Spanish then re-recorded with music and the effects track.

There are none better qualified to do this, perhaps, than the Latins themselves, and no better proof than the excellent dubbing currently being done by Servicio Internacional de Sonido, S.A., of Mexico City. So expert, in fact, is Servicio's dubbing that TV films so transformed have all the appearance of having been originally produced in Spanish.

A partial list of English-language TV film series regularly dubbed by the company includes: "Wagon Train," "Thriller," Alcoa's "Fred Astaire Premiere Theatre," "Dr. Kildare," "Maverick," "Sugarfoot," "87th Precinct," "Naked City," "The Lone Ranger," "My Sister Eileen," "Beachcomber," "Steve Canyon," "Hazel," "The June Allyson Show," "Dick Tracy," "Mister Magoo," "The Danny Thomas Show," "Gunsmoke" and "Twilight Zone" plus several top British TV film series.

Servicio Internacional de Sonido is headed by Sr. Gustavo Candiani, veteran film producer and former studio chief of Mexico's Clasa Studios. Assisting him is his son, Enrique Candiani, formerly of the Mexico City branch of the J. Walter Thompson advertising agency. A full-time staff of 60 technicians and translators dubs an average of 20 half-hour and full-hour TV episodes a week in the Spanish language. The company's three dialogue dubbing studios are in constant use as also is a huge sound stage which is used mainly for music recording and the final dubbing of composite sound tracks.

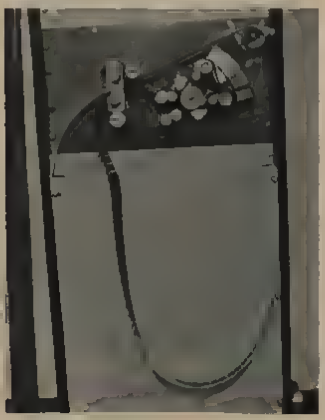
For the dubbing of a Hollywood TV film in Spanish, a copy of the original script in English is provided along with two composite 16mm prints of the original English-language film, plus a recorded track of the music and most of the sound effects. One of the composite prints is carefully broken down into short segments of dialogue and action. These range from three to not

over twenty feet in length, and are spliced to form continuous loops. The studio holds that the precise quality of its final result is largely due to the fact that dubbing is done piecemeal, in small segments permitting re-recording and "polishing" until each segment is considered perfect.

Whereas some dubbing studios have translators work exclusively from the written original script, Servicio Internacional is perhaps the only one where its translators

Continued on Page 380

FILMS TO BE dubbed are broken down into individual scenes or sequences and formed into loops. This enables them to be given the continuous projection that the dubbing operation requires



THE MAGNETIC FILM used in recording the dubbed dialog is also formed in loops—usually of some length as film section to be dubbed. It is threaded in the recorder as shown here

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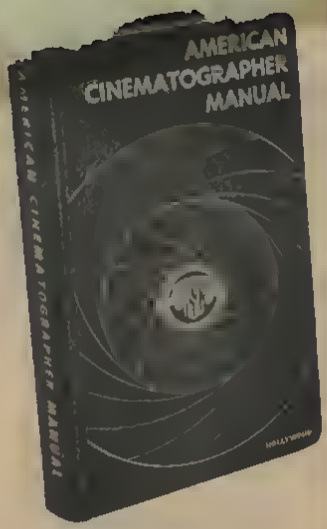

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By DR. NORWOOD L. SIMMON
Manager, West Coast Div., Motion Picture Film Department, Eastman Kodak Company

IT IS THE NATURE of the film industry that the next improvement in picture materials is always just over the horizon. Researchers at Kodak Park in Rochester no sooner firm up the specifications on one film when research is begun on its replacement.

Last month, following an earlier brief announcement, Eastman Kodak presented two new, improved color films at the 91st Semiannual Convention of the Society of Motion Picture and Television Engineers and later at the May meeting of the American Society of Cinematographers. The new films are Eastman Color Negative Film, Type 5251, and its companion print film, Eastman Color Print Film, Types 5385 (35mm) and 7385 (16mm). Type 5251 Color Negative will replace the current Type 5250, and the print films will ultimately supplant the currently used E-K Color Print Film, Type 5382 (35mm) and 7383 (16mm).

EXTENSIVE TESTS of new Eastman Color Negative Film were made by MGM Studio. Test shots ranged from closeups to long shots under various lighting conditions and were photographed by William Daniels, ASC

LOYAL GRIGGS, ASC, photographed the tests made at Paramount Studio with the new E-K Color Negative Film. Comparative shots were made with two cameras—one with Type 5250 Color Negative and the other with the new Type 5251.

Actually, it was the motion picture professionals who set the standards to which the new films were developed. Back in 1959 and 1960, when the industry was still phasing into use of the improved type Eastman Color Negative Film, Type 5250, the goals of those with the greatest interests in motion picture quality set the pattern for the research which has led to the introduction of these important new color films.

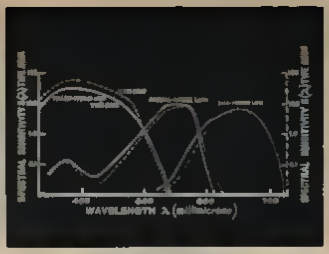
Back in 1949, some serious consideration was given to the state of color cinematography. At that time, the negative-positive method of producing color motion pictures was then less than ten years old. Yet the laboratories had already delivered three major breakthroughs.

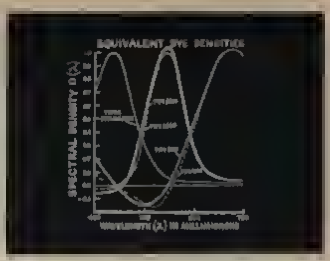
In 1950, the industry had acquired its first workable subtractive color process with the introduction of Eastman Color Negative Film, Type 5247. This film had been balanced to daylight or high-intensity arc illumination. It had an exposure index of 16 for daylight and for arc light.

The trend of the industry led to the rapid development and introduction, in 1953, of a tungsten-balanced color film system. For the next six years, Eastman Color Negative Film, Type 5248, with a tungsten index of 25 and an index of 16 for daylight with a Kodak Wratten No. 85 filter, was the standard of the industry.

The next effort was aimed at whipping the problem which was giving production people the greatest concern: The speed of Type 5248 film required high tungsten light concentration on motion picture sets. The accompanying heat limited both the performance and the technical people. Lighting requirements also made for higher production costs.

Considerable time and effort went into the research which gave the industry Eastman Color Negative Film, Type 5250, in 1959. This material doubled the emul-





CHARTS ABOVE show structure of the new Eastman Color Negative, Type 5251, and compare characteristics with predecessor, Type 5250

sion speed, resulting in an exposure index of 50, without sacrificing the quality to which the industry had become accustomed with Type 5248 film. The director of photography now had a choice of reducing the light requirements on his set by 50% or of closing down lens apertures a full stop, increasing depth of field substantially.

At this point, further technological development had to be pointed in either of two clear-cut directions. The next color negative material, researchers reported, could either be faster or less grainy. The state of the art had reached a point where a choice could be made between one of these two improvements. Since film speed had just recently been doubled, the obvious choice was to move in the direction of better picture quality.

In the case of color print films, the emulsion researchers found themselves in a more enviable position. The state of this art was such that they could work toward several improvements simultaneously. As a result, Eastman Color Print Film, Type 5385, possesses:

Increased speed. The effective printing speed is about four times greater than its predecessors.

Better sharpness characteristics. Acutance is substantially improved.

Improved color rendition. Better couplers in the film have made for a more pleasing color rendition.

The achievements represented by the advent of these two films—each important in its own area—will affect the end products of the motion picture industry in several important respects:

The quality of pictures shown on wide screens or at drive-ins will benefit most noticeably. The improvement in both grain structure and color rendition made possible by these films is readily visible. Some theatrical and outdoor presentations which may now be considered borderline in image quality will provide highly pleasing results when these new materials are used. Furthermore, the industry has also gained the capacity to make its "big shows" still bigger.

Special effects footage can be intercut with original 5251 negative far more effectively than with today's materials. This is because the inevitable image losses in reproducing two generations of film copies will be less apparent when the job is started from an improved original. Second generation prints under the 5251/5385 system will be of a quality close to first generation prints which the industry now sees. This will give directors and special effects men greater flexibility in using footage prepared on optical printers.

The improved quality of prints made from color duplicate negatives will also be noticeable in imported or exported motion pictures. It is industry custom, of course, to run release prints for domestic distribution from the original production color negatives. However, overseas release prints are almost always made from color duplicate negatives which, in turn, are generated from color master positives. In other words, the release print put into foreign distribution is often three generations removed from the comparable domestic product. With these new materials, the foreign distribution print is expected to acquire a viewing quality more nearly comparable with present domestic prints. At the same time, the showings seen in this country will be substantially improved.

These benefits will be achieved largely on a "business as usual" basis. For the cameraman, for ex-

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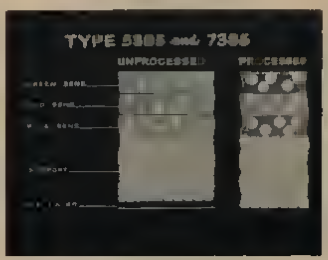
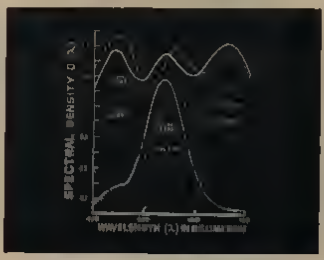
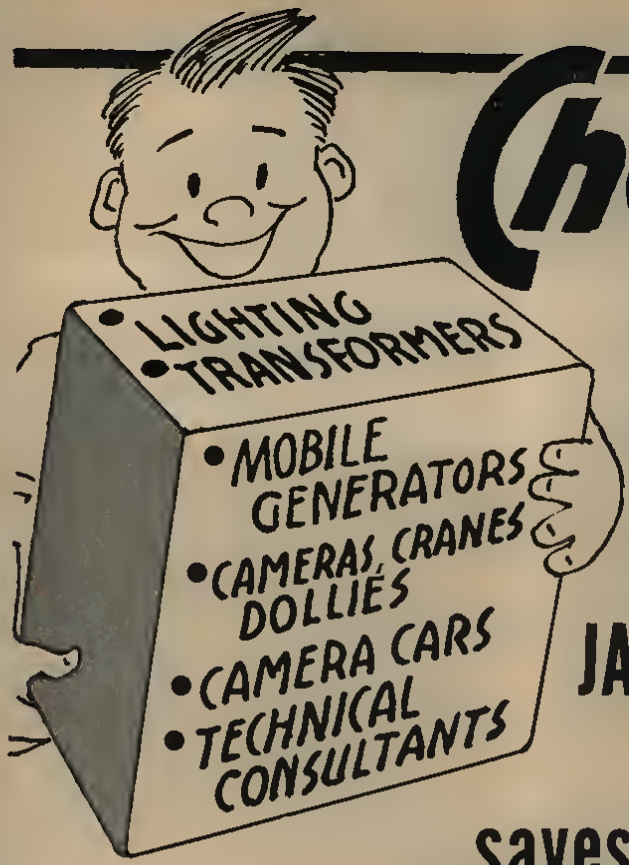


STRUCTURE of Type 5385 and 7385 Color Print Film in unprocessed and processed state



COMPARISON of spectral densities of Type 5385 Color Print Film with Type 5382



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WILDLIFE PHOTOGRAPHY

Knowledge of animal habits essential to successful wildlife photography.

By JOSEPH HENRY

ADEQUATE CAMERA EQUIPMENT such as sturdy tripod, rigid tripod head, and telephoto lenses are essential to getting sparkling wildlife closeups like this

CHARLES W SCHWARTZ, cinematographer for Missouri Conservation Commission and his Black Labrador Brant, who assists in flushing wildlife and game, locating duck nests, etc, in course of Schwartz's filming assignments. Latter's camera here is a 16mm Arriflex mounted with telephoto lenses and driven by power pack suspended from a shoulder strap.

ADEQUATE KNOWLEDGE of animal and bird habits to enable anticipating their actions is one of the major prerequisites for filming wildlife, according to Charles W. Schwartz, biologist with the Missouri Conservation Commission. An award-winning photographer and writer, he specializes in 16mm color films that document the life-cycles of various birds and animals. The visual facts presented by his films aid the Conservation Commission establish regulations for the control of wildlife in the state.

In the course of his 20 years with the Commission, Schwartz and his wife, Elizabeth, a Ph.D. and an esteemed biologist in her own right, have produced over fifteen 16mm color films. The Schwartzes, accompanied by their three children, frequently set out to track animals and birds from their Missouri habitats to migratory stations along the borders of Canada or in the opposite direction to the Gulf of Mexico.

"One of the first things a photographer must learn in filming wildlife in the field is that you get no second chance," Schwartz declared. "If you miss your opportunity, it is unlikely you'll be able to reset the stage in exactly the same way.

"This is why anticipation is so important. For example, knowing that

Continued on Page 376

SCHWARTZ'S WIFE, Elizabeth, sets a tape recorder that will provide authentic wildlife sounds for scenes of waterfowl filmed by her husband

TV Safe Action Limits For Wide Screen Films

Recommendation No. 8 of the Research and Educational Committee af the Americon Society of Cinematagrophers defines the safe actian orea to be followed in producing motion pictures far theatrical wide screen presentatian so they may also be shown on television without impairment af the picture image.

By WALTER BEYER
Chairmen, ASC Research & Educational Committee

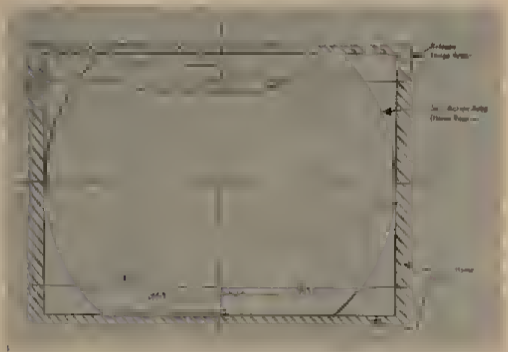


FIG 1—Recommended safe action area for film prints intended for TV transmission and made from wide screen (flat) prints of theatrical feature films

FIG. 2—How the extra wide lines between frames of wide screen (flat) prints result in black bars at top and bottom of the TV picture when receiver screen dimensions are disregarded

THIS TECHNICAL recommendation—number 8 in a series prepared to date by the ASC's Research and Educational Committee—sets forth the safe action areas that should prevail in wide screen release prints of theatrical films so they may also be shown on television. The information contained in this recommendation has been compiled for the benefit of producers, directors, production managers, art directors, directors of photography and camera department heads in the industry as a guide for composition and aspect ratio considerations for motion pictures produced essentially for theatres but considered also for subsequent release for television. The Committee feels that consideration of this recommendation can result in savings of thousands of dollars when prints of wide screen theatrical films are made for TV.

Recommendation No. 8 embraces two types of wide screen motion pictures: A—conventional (flat) wide screen films, and B—anamorphic (squeezed) films such as those in CinemaScope. (The requirements for films produced especially for television were covered earlier in the ASC's Recommendation No. 4).

A:—Wide Screen (Flat) Prints Of Feature Films Composed In 1.85-to-1 And Other Aspect Ratios

The television picture and film reproducing system is strictly a 1.33-to-1 aspect ratio presentation device. All dimensions for camera aperture, TV station projector aperture, and transmitted area, as per ASC Recommendation No. 4, bear this out and need no repeating here except for the "safe action" area since it is the only one that concerns what the viewer ultimately sees on his home receiver.

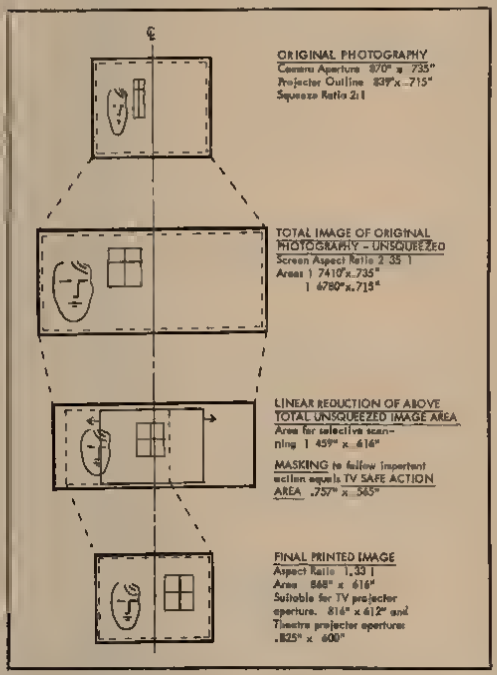
ED NOTE. For the non technical reader the terms "flat" and "squeezed" above may require explanation. A "flat" wide-screen motion picture is one photographed (usually on 35mm film) without an anamorphic lens and where the wide screen format is provided by reducing the height of the film frame to produce a greater rectangular picture format. A "squeezed" wide screen picture is one photographed with an anamorphic lens which squeezes or laterally compresses the wide screen composition as seen in the finder so it will be accommodated within the frame limits of 35mm film. In projection, the "squeeze" is reversed or un-squeezed, so the picture appears on the screen in an aspect ratio on the order of 2-to-1 or greater.

The "safe action" area is that portion of the picture area inside the camera aperture borders within which all significant action should take place for "safe" or full reproduction on the majority of black-and-white and color home receivers. This has been established since 1956. The overall dimensions of this area are 0.757"x0.565", with either straight or curved sides, as shown in the diagram Fig. 1.

Excluding those films made especially for TV release, we are dealing here with two different types of wide-screen (flat) release prints as they are made for theatres.

1. Wide-Screen Prints composed for any aspect ratio other than 1.33-to-1 but *protecting the full picture height of the standard academy camera aperture.*

Figure 1 illustrates the recommended safe action area for prints of wide screen (flat) theatrical films for television. Superimposed are the top and bottom frame line limits for films in the 1:66-to-1, 1.75-to-1 and 1.85-to-1 aspect ratios. The shaded area indicates the amount of picture loss on home TV receivers, and the curved lines the recommended safe action area for satisfactory picture reception on home receivers. As may be seen, picture action composed for any of the three wide screen formats will not extend to the top and bottom limits of the TV


ORIGINAL PHOTOGRAPHY
Camera Aperture .870" x .735"
Projector Outline .839"x .715"
Squeeze Ratio 2:1
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Screen Aspect Ratio 2.35 1
Area 1.7410"x.735"
1.6780"x.715"
LINEAR REDUCTION OF ABOVE TOTAL UNSQUEEZED IMAGE AREA
Area for selective scanning 1.459" x .616"
MASKING to follow important action equals TV SAFE ACTION AREA .757" x .565"
FINAL PRINTED IMAGE
Aspect Ratio 1.33 1
Area .848" x .616"
Suitable for TV projector aperture. .816" x .612" and Theatre projector aperture .825" x .600"

FIG 3—How anamorphic prints are decompressed and re composed to produce flat prints suitable for TV. In the process of making such prints, a traveling scanner having a standard TV aperture of 1.33-to 1 causes printer to dupe pre selected areas in each frame of the original anamorphic print

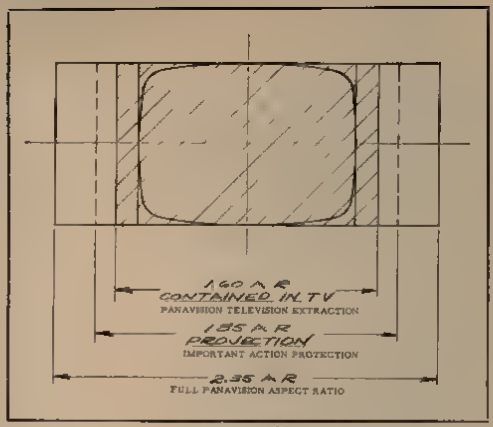

FIG 4—Panavision's method of extracting prints for TV from Panavision 2.35 to 1 films involves printer lens that provides linear reduction, has non linear squeeze ratio across horizontal field

screen area. Where the full TV screen height is not considered in making prints for TV, there is a loss of intimacy, with the action appearing to play farther away from the camera.

Theatrical prints of this type pose no technical problem for release on TV except for main titles and credits. Where these are composed utilizing the wide-screen aspect ratio area for best screen presentation, the cropping in width on the TV receiver can be serious; therefore, the establishment of "safe title" area recommendations is presently under consideration by the ASC's Research and Educational Committee.

2. Wide Screen Prints *not protecting the Academy camera aperture height representing prints with wide frame lines.*

Economic reasons in wide-screen film production have led the studios to omit the protection of the full frame height and reduced the camera aperture to suit their needs. Prints from such productions, made for theatres, have wide frame lines with picture information of only approximately 0.520" height, the width, of course, being the same as for prints described in earlier paragraphs.

Figure 2 illustrates the "safe action" area representing the home receiver screen and, as an example, a wide frame line print of a 1.85-to-1 aspect ratio is indicated. Here it is obvious that the missing picture and protection area will result in the appearance of a black bar on top and bottom across the home receiver screen of approximately one-half to one inch.

This understandably is an undesirable form of picture presentation, as pointed out in my article on Wide screen Systems in the American Cinematographer Manual, which was reprinted here last month. This Committee referred the matter to the Federal Communications Commission and subse-

Continued on Page 391

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IN SHOOTING SCENES for "Pathways Through Nursery School," two Auricon cameras record simultaneously action of children which could neither be planned nor rehearsed. While one camera recorded medium and closeup shots, second camera made cover shots of activities. Cinemaegraphers were girl students of Stephens College cinema class (Photo by Marvin Kreismoe).

Multicam Technique In College Film Production

Stephens College film makers find method ideal for shooting action that cannot be pre-scripted or rehearsed.

By JOHN R. BOUSEK, JR
Stephens College, Columbia, Missouri

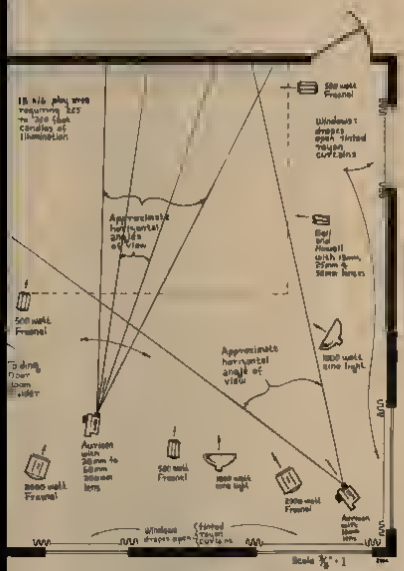
YOU CAN BEST learn by doing. This statement is true only if what is attempted is possible. During the pre-production planning and the actual production of "Pathways Through Nursery School," a twenty-three-minute color film describing the Stephens College nursery school, the question "Is it possible?" kept creeping into the author's mind as each new problem was encountered.

The production presented numerous technical problems. Some were solved intuitively, others by way of imaginative production procedures, still others through the testing and use of new color film emulsions.

Briefly our project was to produce an on-location film, thirty minutes or less in length, that would adequately describe the Stephens College Nursery School to child-study students and to parents of pre-school age children.

The production limitations were as follows: 1) The film had to be shot in color. 2) Actual filming, both interior and exterior, was to be done during regular class hours while the school program was in progress. For this reason the production could not be pre-scripted and consequently no scenes of the children's activities could be planned and rehearsed. In other words, we had to shoot it as it happened. This was insisted upon in hopes of capturing the spontaniety of the pre-schoolers activity and the flexibility of the nursery school's daily program. Only a rough treatment outline was followed in filming such sequences. 3) Equipment, cameras, lighting, crew, etc., were to be held to a minimum. Personnel and economic restrictions were part of the limiting factors in this aspect of the production. This was also insisted upon for the sake of spontaniety. Too much equipment and numerous crew members on the scene would only distract the preschooler. 4) The camera operators

Continued on Next Page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2000-watt Fresnel
Auricon with 25mm lens
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DIAGRAM shows relative positions of three cameras, the various lights, etc., with respect to classroom layout in which scenes for "Pathways Through Nursery School" were shot

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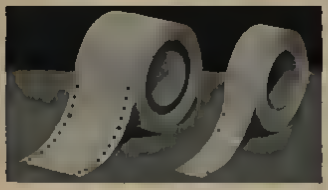

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Continued from Preceding Page

would be young women of first, second, and third-year college age. This was a necessity for two reasons. Stephens College is a school for girls, and the production was to be an "in plant" project with members of the Motion Picture Production Class serving as filming personnel. The crew consisted of students who worked under the author's direction and supervision.

The first limitation, that of shooting in color with minimum lighting, was overcome by using Eastman's Ektachrome ER types 7257 and 7258 film for interiors. Test footage shot revealed that we could get a good picture with adequate depth of field and acceptable resolution, or minimum graininess, if we exposed at f/5.6. This required 225 to 250 foot candles of overall illumination. The largest interior area that we had to light measured 18 feet by 16 feet. By mixing sunlight with tungsten illumination we were able to get the required light level. This obviously required filtering the daylight. The following number and types of lighting units were used: two 2000-watt Bardwell McAlister fresnel spotlights, three 500-watt Century fresnel spotlights and two 1000-watt Cine Lites. All lamps were balanced for color temperature of 3200° Kelvin. The accompanying diagram indicates the relative position of all set lamps during filming of the largest interior set-up.

The rooms in which we filmed were not adequately wired for the additional voltage load our lights required. We did not have a Color-Tran unit available so we rigged a special range line with adequate outlets to bring the required electrical power into the interior shooting area.

When shooting the interiors, we endeavored to keep the window drapes open for two reasons. First, to eliminate a "closed-in" feeling that would have resulted had all drapes and shades in the room been closed. Second, we wanted to integrate the available daylight with the set lighting and thus reduce the number of lighting units required. We were able to do both by placing sheer, tinted rayon curtains between the open drapes.

A unique lighting problem presented itself when we were preparing to shoot the children's nap time. In this sequence we wanted to achieve a subdued lighting effect and a quiet atmosphere. This, we felt, was adequately accomplished by removing the tinted curtains from the windows permitting only daylight to illuminate the room. In this instance the exterior Ektachrome ER emulsion type 7257 was used. Using only the available daylight, we were obliged to expose the scenes at f/1.9 and f/2.8. While the desired subdued lighting effect was achieved, an increase in graininess was noted in the result. This was one instance in which graininess proved an asset, however. The combined effect of low illumination and increased grain added to the relaxed, quiet atmosphere that we wanted in the nap time scenes.

The problem of filming the preschooler actively engaged in a project without stultifying the spontaneity by pre-scripting and rehearsals (and yet maintain continuity) was solved by using the multiple camera technique in shooting. At least two cameras were used in filming the interior scenes. Cameras used were 16mm Auricons powered by Auricon portable battery power supply and kept in synchronization with an Auricon sixty-cycle converter and frequency regulator.

One camera was equipped with a Kern-Paillard f/1.9, 16mm focal length lens which held a cover shot throughout the scene. The other had a Pan-Cinor f/2.8, 20mm-to-60mm zoom lens for recording a variety of shots ranging from a medium long shot of the activity to individual closeups. For some of the large-area scenes a third camera a Bell and Howell 70 DR with 13mm, 25mm and 50mm lenses was used to make interesting cut-in shots. The relative positions of the cameras during the filming of one such scene are shown in the diagram.

The use of multiple cameras in-

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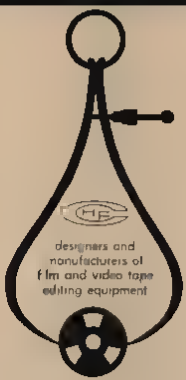

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creased the total amount of footage shot, of course. But we succeeded in holding the production shooting to a 3 to-1 ratio. The author is convinced that it was the best solution to the problem of maintaining spontaneity, continuity, and interest in scenes which could not be pre scripted nor rehearsed This, of necessity, increased the editing time, too. Here, also, the author felt that the results justified the increased effort and expense.

The exterior filming was much easier to do. Working from a very general treatment outline it was comparatively simple to select typical exterior play situations The continuity in these sequences was maintained by selective editing and explanatory narration. Commercial Ektachrome type 7255 was used in filming the exteriors We noted a difference in the rendition of colors between these scenes and the interior scenes which were shot on the ER emulsions The differences, however, were not visually disturbing. The release printing was done directly on Eastman Reversal Color Print film, type 5269

Because of our small crew and equipment limitations, no synchronous sound was recorded during the filming sessions. Other than terminal music, narration is the only sound used in the production. It is likely, of course, that added background sounds and music would have improved the production aspects of the film But without them the film is still a good instructional and information production.

Working with an all-girl crew is certainly a different and pleasurable way to shoot a film Given instruction, time and patience they proved capable and efficient in operating the cameras. The actual directing, lighting, and editing of the picture was done by the author. ■

Res ipse loquitur

NEW LOOK IN FILM TITLES

Continued from Page 357

a sleek, black Tom possessed with an uncanny perception of what was wanted of him and who turned in a remarkable performance

Using his 16mm version as a guide, Bass prepared a storyboard using single frame blowups from the film, and submitted it to Feldman for approval From this and subsequent discussions, the ultimate pattern for the titles for "Walk On The Wild Side" emerged A final script was prepared and production started at Columbia Studios under the direction of Don Starling, head of the studio's insert department Don Glouner, ASC, head of Columbia's Special Photographic Effects Department, directed the photography.

During filming of the initial test footage in 16mm, Saul Bass explored the results obtainable by overcranking the camera. From this it was determined that the entire title background action would have to be shot at above normal speed in order to impart the desired slow, slinking gait desired in the cat as it ambled along in its exploration of the alley. Bass' test film enabled him also to determine something about the camera angles required and of the lighting, and to arrive at the timing necessary for various points in the film's progressive action where the individual credit titles were to be superimposed—the time interval for each being fixed by the number of seconds required to read each card

All the background action for the title sequence was photographed on a Columbia Studio sound stage. Here the alley set was built on an elevated platform about three feet in height This permitted the desired low-angle photography with the camera mounted on a crab dolly. Although the completed title background appears on the screen as one continuous take, except for an occasional dissolve, the complete action of the cat moving across screen was actually shot in several camera setups. Often as many as a dozen takes were made in a single set-up, according to Glouner, in order that flawless continuity of action be maintained between the various key takes. The company shot three full days on this title production and later returned another day for some additional footage that the editing showed was necessary to smooth the action or provide the full interval required for superimposition of a title card.

Most shots were made at 72 frames per second, while a few were made at 48 frames For this a Mitchell 35mm high-speed camera was used. Low-key

lighting was general throughout the background sequence, and it was a tricky matter to keep the cat well lit when it entered a shadow portion of the set. During most of the takes, the cat maintained a steady pace, which made it possible to time the movement of the camera dolly to keep the cat fully centered in the finder.

Perhaps the real highlight of this action is where the cat, having entered a section of pipe, emerges at the other end in perfect time with the camera so that as it appears, it is precisely centered on the screen. Luck played a big part in the accomplishment of this, admits Glouner, who says it would otherwise have been impossible to know precisely when the cat would emerge from the pipe. Be that as it may, this shot is considered a singular photographic achievement, one invariably mentioned by those who have witnessed the picture.

Following this, of course, the real climax of the action takes place—the sudden encounter of the black cat with the white, and the ensuing fight. The screen result is a tribute to the imaginative cutting given the film at this point.

It was impossible to get the two cats to fight in a normal way as they came face to face with each other, no matter how many times they were put through the action. Finally it was necessary to provoke the fight, or rather produce takes which would cut together to give the illusion of a genuine cat fight. With the camera moved in close and focused on the white cat, the black cat was thrown bodily into the face of the other, which produced the fury of spitting and clawing hoped for. This action was repeated and shot several times, with position of the camera altered slightly each time to produce variety in the takes for cutting purposes.

In addition to the Mitchell high-speed camera, a hand-held variable speed Arriflex camera also covered the action at close range. Additional cuts for the brief fight scene were provided by still other improvisations.

For one shot the camera was moved in close on the black cat, then the trainer who supplied the animals passed the white cat over the black, but out of camera range, causing the latter to spit and claw at the white cat as it passed overhead. The action was then repeated, with positions of the cats reversed. Following this, a num-

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ber of tight closeups were made of each cat as it spat and clawed at its adversary out of camera range. For this, the cat was held close to a black velvet backdrop. Fast, staccatto cutting of these shots gave the desired fight result. In the final editing, some cuts are as short as three and four frames in length.

Glouner and his Special Photographic Effects Department contributed more than the initial photography for this title layout. Where some shots would better cut together enlarged, or the action improved by altering the printing speed, this was done through the "miracle" methods that belong essentially to all studio photographic effects departments. In the cat fight segment, for instance, some takes were reversed or "flopped over" in the printing, producing a more desirable result for cutting.

After the five action background had been completed and approved, the several title cards, designed and produced by Saul Bass were turned over to Glouner's department for superimposing at specified points in the background. Each card was made to appear and end on the screen with a

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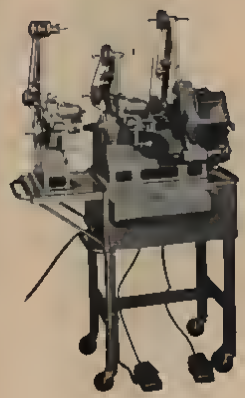

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fade

Saul Bass keeps close vigil on every title project until it is fully cut, in order to maintain the original concept. He believes also that a good musical score is important to every title presentation. Elmer Bernstein supplied this for his title production for "Walk On The Wild Side," and also the score for the picture.

Bass created his first movie titles eight years ago for Otto Preminger's "Carmen Jones," and has titled every picture that Preminger has produced since. In all, he has designed and produced some thirty titles for major productions, including "Bonjour Tristesse," "The Seven Year Itch," "Saint Joan," "The Man With The Golden Arm," "The Big Country," "Storm Center," "Anatomy of a Murder," "Exodus," "The West Side Story," and the recently released "Advise and Consent." Besides the unique entertaining concept he gives to titles, incorporated in the design or pattern of each is some provocative symbolic element which is also adapted for all forms of a film's promotion, from letterheads to 24-sheet posters. Notable were the partial figure holding a broken sword for "Saint Joan," the grotesque arm for "Man With The Golden Arm," the segmented figure for "Anatomy of a Murder," the burning flame for "Exodus," and the flag flowing in a breeze for "Advise and Consent."

Certain to be among the best remembered of these is the roving black cat which generates sharp audience interest as it moves relentlessly across the screen and leads viewers directly into the initial action of "Walk On The Wild Side." ■

WILDLIFE PHOTOGRAPHY

Continued from Page 365

male prairie chickens gather every spring in certain areas and go through elaborate courting ceremonies, offers the wildlife photographer tremendous opportunities for excellent footage."

Once you know where your wild life subject will be, the next problem is getting close enough to shoot it. The hunter, of course, only need remain concealed until he can loose one blast. The photographer must maintain his concealment, ideally 20 to 30 yards away from the subject, long enough to get the necessary footage. Schwartz shoots about 12 frames of film for every frame that appears in the finally edited picture. And, to capture authentic sound effects, he often uses a portable tape recorder with a sensitive, directional microphone.

The telepboto lens is the wildlife photographer's most important tool. It not only pulls in the subject matter for closeups, but, by its shallow depth of field, makes birds and animals "stand out." Otherwise, they would tend to blend in with the background foliage due to their protective coloration, Schwartz explains.

Schwartz's camera lenses range from ½-inch to 300mm for his two 16mm cameras. He uses lightweight but very sturdy tripods equipped with hydraulic heads which insure the steadiness and smooth panning particularly necessary for telephoto work.

Schwartz has standardized on Kodachrome film because of its fine grain, brilliant color, wide availability (even in remote areas), ease in intercutting, and the better mass production of finished prints it affords.

Fortunately, the wildlife cameraman is not entirely at the mercy of the annual habits of his shy subjects. "Anticipation," as described above, is just one of five basic techniques Schwartz advocates. The others are:

Baiting with food, water, love or hate symbols. For instance, in filming one sequence, Schwartz needed a scene showing angry bluejays. Bluejays and owls are natural enemies, so Schwartz placed a stuffed owl in a tree in his backyard.

In no time at all, the bluejays in the neighborhood had gathered in an angry squawking, whirling, blue melee. Schwartz photographed them at many angles, omitting, of course, the

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stuffed owl from the picture.

Opportunism is also valuable. Schwartz keeps his cameras ready for action, both on trips and at home, and shoots anything that catches his eye. He may have no immediate use for the footage, but it often proves valuable at some future date.

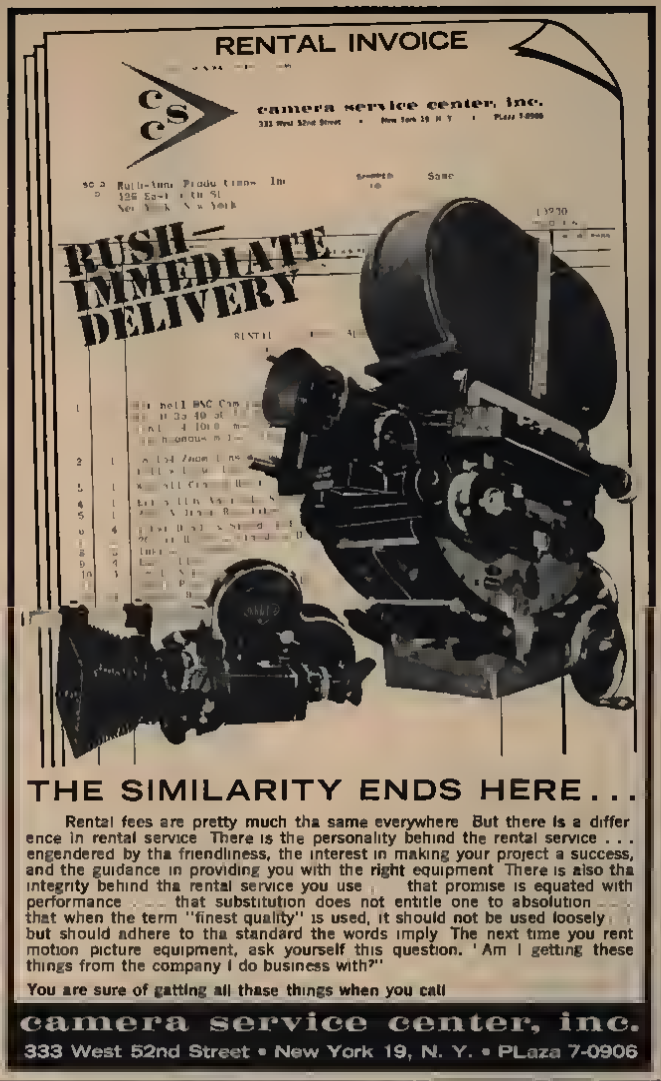
Shoot 'em at home under studio conditions. This tenet may not prove practical for photographers whose wives are not biologists. However, Schwartz has made good use of it. For example, he wanted to show the tunneling and nesting habits of a pocket gopher. He brought one home and placed it in a glass-sided, dirt-filled box. He covered the sides with black cloth so light would not discourage the animal from burrowing down alongside the glass. Later, the cloth was removed and the animal and its tunnels photographed through the glass.

By cutting from outdoor scenes of the gopher pushing dirt from the mouth of its burrow, to the close-up shots of its tunnels, Schwartz achieved some highly effective footage.

Tame the animal and train it. This, too, offers potential distaff difficulty. But, Schwartz did this profitably with a gray fox. Brought home as a four-ounce kit, it was allowed to grow up as a family pet. Later, some striking scenes of the fox photographed in hot pursuit of a rabbit were used in a film describing predation among wildlife. Although Schwartz believes that wild animals should not be raised in capitivity, he recognizes that it is sometimes the only way in which certain footage can be obtained.

Whether one or all of these basic techniques are used, Schwartz emphasizes that the essence of effective wildlife filming is to determine the entire pattern of life of the subject animal, so the photographer can present it accurately and logically in relation to its environment.

A typical filming undertaking begins for Schwartz when the Missouri Conservation Commission assigns a specific project to him. He and his wife first prepare a shooting script, along with hand-drawn sketches of some of the scenes they hope to capture. This material goes to the commission for its approval. Then the actual shooting begins—possibly in Schwartz' backyard, or perhaps the whole family will head out for Canada on the assignment.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On his return, Schwartz screens the footage he shot. He selects the best takes and sends them to the Calvin Company, Kansas City, Mo., which produces an edge-numbered work print, in color.

The original, also edge-numbered, stays at Calvin. The work print is delivered to Schwartz who edits it and carefully matches the wildlife sounds which were recorded on tape when the footage was shot. In this phase of putting the film together, he works closely with the Commissions' technical editor, Werner Nagel, who writes the narrative script.

When the various components are completed, Schwartz takes them to the Calvin Company. There, he selects a narrator for the film, often interviewing several until he finds one with just the right voice. Calvin, working from his edited print, uses the traveling matte method to produce a print with the desired optical effects, etc. Narration, wildlife sounds, music and picture film are combined to produce a pilot print which Schwartz carefully checks before it is approved for release print production.

Calvin then produces a finished print plus an internegative from which the required number of release prints are made. An average print order comprises 25 copies, although some films have now sold more than 150 copies.

While these films are produced directly under the Missouri Conservation Commissions' supervision, sometimes industrial firms help subsidize filming costs where a film is considered a much-needed aid to wildlife conservation. The prairie chicken, for example, probably owes its existence today to the education wrought by films made by Schwartz and his wife.

A near relation of this wild chicken.

CAMERA TRACKING MOUNT

PICTURED ABOVE is one of several motion picture camera tracking mounts recently delivered to the Navy at Pt. Magu, California. Developed from M-45 tracking mounts which formerly supported 50 calibre machine guns, the conversion, by Gordon Enterprises, North Hollywood, resulted in improved tracking accuracy, and reduction of vibration to the cameras which mount lenses of extreme focal length.

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the heath hen, became totally extinct in 1930. To save prairie chickens from the same fate, Schwartz produced a film showing the life-cycle of the bird. Thanks to laws generated by exhibition of this film and a book published on the subject, the chicken has survived, although in a limited area.

Films produced by Schwartz for the Missouri Conservation Commission have been honored with a host of awards, both national and international. For example:

For "Bobwhite Through the Year" CONI Grand Medal 1953, International Sports Film Festival at Cortina d'Ampezzo, Italy; Special Mention 1953, North American Wildlife Society, Conservation Education award 1954, North American Wildlife Society; "Best Conservation Motion Picture of the Year 1953," National Association of Conservation Education and Publicity; Quail Award 1953, Missouri Quail Hunters, Inc.

For "Cottontail." "Superior 1955 film production," American Association for Conservation Information; 1956 "Honorable Mention," North American Wildlife Society, "Diploma d'honor" at International Sports Film Festival, Cortina d'Ampezzo, Italy, 1956.

For "Better Pond Fishing." "Diploma d'honor," at International Sports Festival, Cortina d'Ampezzo, Italy, 1956.

For "A Way of Life." Blue Ribbon, American Film Festival, 1959.

For "The Story of the Mourning Dove." "Best North American Wildlife Movie, 1959," American Association for Conservation Information.

In addition, Schwartz and the state commission have recently produced a series of one-minute television clips on "Outdoor Manners," which demonstrate proper conduct in the field while hunting, fishing, camping, picnicking, or boating.

Like the wildlife films, these are offered free to Missouri institutions and organizations, and prints are sold at a minimum charge to others. ■

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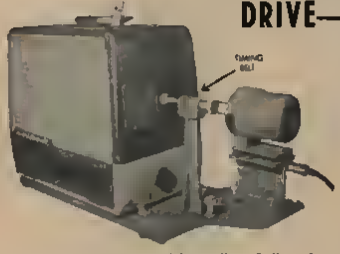

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SPANISH VOICES FOR FILMS

Continued from Page 361

work directly from film loops, listening to the original dialogue and studying lip movements carefully in order to catch subtle speech rhythms and patterns that might otherwise be overlooked. Each TV film series undergoing translation has its own exclusive translator who has been selected on the basis of background and knowledge of the subject matter. Thus he is uniquely qualified to understand and interpret the special essence of that particular show. He remains with his assigned series permanently with the result that each episode reflects a style consistent with all the others in a given series.

Translators are highly trained bilinguists, most of whom have lived in the United States and absorbed the typically American idioms and colloquialisms which abound in our television films. They work constantly to keep abreast of the latest Americanisms, many of which often defy translation to foreign languages. These Common American expressions, especially "bep-talk" and our colorful slang, if translated literally, would mean nothing to foreign audiences. The trick—and it is a difficult one—is to find colloquial expressions in Spanish which will convey precisely the same meanings as those expressed in English on the original sound track. In the case of series as uniquely American as "Wagon Train" or "Gunsmoke," for example, such translation becomes a real challenge.

Another major problem arises out of the fact that the Spanish language varies considerably in its spoken character from country to country throughout Latin-America. Each area has its own accent, dialects, idioms, rhythm, slang and local expressions. Dialogue translations, therefore, must be made and recorded in what is termed "neutral" Spanish—an idiom free of localisms or colloquial expressions which might not be understood in all of the Latin countries. As a double check on this important factor, Servicio studio's translation supervisor carefully scrutinizes every line of each translation before it is recorded to insure that nothing obscure or typically Mexican slips by.

The film dialogue translator is further burdened by the necessity of constructing his Spanish dialogue so that the sounds will visually fit as closely as possible the lip movements of the actor speaking the original English. To achieve this result while preserving an accurate sense and natural flow of the dialogue is no small task—and yet, it is one of the most important requirements for a successful dubbing job.

While the translation is being completed, Servicio's director is busily casting voices to match the various characters appearing in the film. In Mexico City more than 200 experienced actors are available for this work, and represent every age, type and voice characteristic. All are highly skilled in the exacting process of dubbing and usually achieve a perfect synchronization in two or three "takes".

During an actual dubbing session, a loop of the film's action is projected continuously in the recording studio onto a screen placed directly in front of the actors engaged to supply the new voices. They watch it and study the original dialogue a few times to get the feel of the scene and the proper perspective for the voices (i.e., whether the character is whispering or shouting, for example.) Then the director calls for a take. As the scene is again flashed on the screen, the actors endeavor to exactly synchronize Spanish dialogue with the lip movements of the characters in the scene. When a take appears good it is played back immediately with the film loop so that the director can check expression and synchronization. If he is satisfied, he says: "El que sigue!" (roughly translated: "Let's have the next one!") and the projectionist threads the next loop of film in the projector. A dubbing session for a complicated show may run at breakneck speed from eight o'clock in the morning until 2 a.m. the next with only an hour off for food, and—it may be presumed—a pint of plasma! The actors and technicians tend strictly to business and keep right on recording no matter what cataclysmic forces may erupt around them.

During dubbing a style of pronunciation which, again, might be described as "neutral Spanish" is used. That is, the actor's are careful to pronounce the language in a manner that is free of any Mexican accent or characteristic lilting rhythm. While this pronunciation in itself may be somewhat lacking in "flavor," the voice actors make up for this through

an intensity of emotion dramatically expressed.

Each of the five directors on Servicio's permanent staff handles episodes of several TV film series each week. Typical is Director Fernando Alvarez, a graduate of the University of Southern California Cinema Department and son of famed Mexican film star, Sofia Alvarez. Sr. Alvarez maintains he received a crash course in Hollywood techniques of motion picture direction and editing while functioning as studio liaison representative and production right-hand-man to American Producer-Director Herb Lightman when the latter filmed several pictures in Mexico a few years ago.

"I learned it the hard way," he observes, with a rather harassed air. "but I learned it fast."

Alvarez began his career in dubbing as a translator, rapidly moving up to the top directorial ranks. His knowledge of American slang, gleaned during his four years at USC, stands him in good stead.

In preparing the material for dubbing, the picture is set up in loops cut from a 16mm composite print. Matching lengths of 35mm Magnastripe sound recording tape are also prepared in loop form for each segment. The two are synchronized by means of a punch mark on the leader of the picture loop and a corresponding beep signal prerecorded on the magnetic tape loop. Triple punch marks on the leader of the picture loop cue the actors to begin the dialogue. Threaded up in the projector and recorder respectively, the two loops remain interlocked during recording. The fact that the sound recording tape is set up in a loop results in an economy of stock (since only the best sound take remains on the tape), and also permits instantaneous playback of the last take for checking purposes. When all loops have been recorded and approved, they are cut apart and assembled in correct order to synchronize with the sound 16mm composite print of the film, which has been preserved intact as a guide.

Since a music and sound effects track is usually provided separately with each film to be dubbed, it is only necessary to record such additional sound effects as footfalls, door openings, etc., which would normally have been recorded along with the original dialogue. When, as occasionally happens, no music and sound effects track is provided, the studio must create and provide such a track from its own music and sound effects library. This track, then, along with and newly recorded Spanish dialogue track is mixed in a dubbing session to produce a master composite optical track. The studio laboratory then turns out the required number of release prints.

Working under constant pressure with no compromise in quality or precision, the staff of Servicio Internacional de Sonida, S.A., works literally day and night to bring television entertainment filmed in Hollywood into homes all over Latin-America.

TV SAFE ACTION LIMITS

Continued from Page 367

quently received its letter in reply containing the following explanation:

"Although our television transmission standards are based upon an aspect ratio of 4-to-3, the broadcaster is not required to completely fill the screen (home receiver) at all times.

"We do not consider it desirable at this time (1961) to promulgate a rule which would restrict licensees' discretion in this matter.

"If future experience should show that this is a proper area for further regulation, we will then consider amending rules.

"Your letter has been most helpful in calling our attention to this problem."

The major TV networks also had some pertinent views on the matter, and these also were made known to the Committee which was informed that:

> Major networks have a right and do refuse to show prints with insufficient picture height.
>
> In practice only non-network stations broadcast prints of the type described above without concern for the showing of frame lines.

Technically it is possible, of course, to make the aforementioned wide frame lines disappear by an electronic vertical "stretch". This would, however, require the cueing of entire films since valuable commercials or other material photographed to fit the TV screen, when intercut with a wide frame line print, would be cropped severely in height.

From a standpoint of retaining the highest presentation quality on free TV and more so, on eventual pay as-you-see TV, the answer to the problems graphically shown in Fig. 3 should be taken seriously and wide frame line

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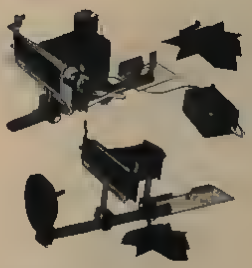

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B. Anamorphic (Squeezed) Release Prints Composed for 2.35 to 1 Aspect Ratio

A method of decompressing and recomposing anamorphic prints of 2.35 to-1 aspect ratio to obtain flat prints in a 1.33-to-1 aspect ratio has been developed by the research department of 20th Century-Fox and De Luxe Laboratories. A special flat 1.33-to-1 print for TV release can be made having no loss in height nor width for 100% of the important action essential for storytelling on the TV home receiver.

It would exceed the scope of this ASC Recommendation to go into all details of the equipment involved in this process; the following, therefore, is mainly a basic outline of image or picture information as it follows from the original squeezed photography to the flat print for TV.

As may be seen in the flow chart, Fig. 3 (from top to bottom), the original photography results in a release print for a theatrical projector aperture of 0.839"x0.715". having a 2-to-1 squeeze ratio (top block). This is the equivalent of an unsqueezed flat image of 1.678"x0.715" representing the full aspect ratio of 2.35-to-1 (second block). Since the height of this image is still 0.715" but the flat release print reuires only 0.612" plus, for the TV station projector aperture. a linear reduction step of about 1.2 times is provided. This leads to the third step in the flow chart that produces an image having an overall area of 0.616"x 1.459" and containing 100% of the picture from the original photography.

In this area, an additional frame or finder outline is indicated with the dimension of the TV home receiver (safe action) area of 0.757"x0.565" which can travel or scan along the horizontal center line of this image area.

The fourth and last step in the flow chart represents the final printed image of either the dupe negative and/or flat 1.33-to 1 TV release print which conforms to the TV station projector aperture of 0.816"x0.612"

The dotted lines between the last two blocks on the flow chart indicate, as an example, that action from the extreme left inside the 2.35-to-1 field is perfectly recomposed for the flat 1.33-to 1 version. Operational details are given in the Appendix, which follows.

The above method of decompressing and re-composing 1.33-to-1 flat prints from 2.35-to-1 originals permits utilizing the entire width and height of the original photography of the theatrical screen presentation. This system also works perfectly for pictures made earlier in anamorphic process having an an aspect ratio of 2.55-to-1.

APPENDIX

The Basic Practical Operation For The Flat Print Extraction From Squeezed Photography Is As Follows

Regular squeezed release prints are projected un squeezed on a screen, with the safe action area lines superimposed as a guide for the print inspector. (See 3rd block from top, Fig. 3). For this operation, a projector of special design having a scanning finder is employed.

The finder frame can be shifted horizontally enabling the inspector to follow the important action. A control tape is made of this manual operation which is later used to shift the optical system in the special printer to accurately repeat the selective scanning during the making of the flat dupe negative.

The traveling or scanning can be done in plus-minus five steps to the left and right of the center position.

The shifting of the optical system in the printer occurs behind the closed shutter and is capable of a full step from the extreme left to the extreme right position—thus permitting making cuts automatically.

The printer is further capable of traveling with the optical system continuously during the printing operation, again activated through the predetermined control tape.

This method of continuous selective scanning was made possible through a very interesting research study for determining the speed for such scanning operation. By way of a statistical survey, it was found that only two panning speeds are required to satisfy any possible cross-screen action which might be encountered in a feature film production.

The new dupe negative for the 1.33-to-1 flat print can be extracted from three master positives simultaneously in one operation.

Panavision's Process

Still another practical method for producing flat extraction prints for TV from a squeezed print has been developed by Panavision, Inc. It involves

Continued on Page 384

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TV SAFE ACTION LIMITS

Continued from Page 382

confining the important action and also the composition during the 2.35-to-1 shooting to the established aspect ratio limits of 1.85-to-1, as shown in Fig. 4.

A special printer lens is used in this process which provides a measure of linear reduction to compensate for the picture height requirements. Furthermore, it has a non-linear squeeze ratio across the horizontal field to compensate for some of the distortions induced by the curved surface of TV receiver tubes.

Because all motion pictures, whether designed and produced for theatres or for television, are photographed with every consideration for sound pictorial composition it is of vital importance to every director of photography in the film industry that all necessary steps be taken to preserve the essence of such composition in the transmission of film prints made for TV by television stations. The ASC's Research and Educational Committee will continue to work to bring this about. ■

"BIRDMAN OF ALCATRAZ"

Continued from Page 355

imposed upon them. In sharp contrast was the huge prison mess hall set, which offered much greater photographic scope. The very walls of this set were erected flush against the sound stage walls and for one dramatic scene provided a stark background for the murder of a guard. Here, strong crosslights, as coming from the windows, pointed up the realism of the scene.

But it was in the prison riot scene that Guffey found opportunity to create a vivid pictorial representation of the hell that ensues when crazed prisoners revolt and take over a cell block. For this, Guffey employed harsh, low-key lighting and had the camera mounted on a Chapman boom. The camera was moved subjectively into the vortex of the riot and followed the key action as it erupted in different parts of the double-tiered cell block. Strong crosslighting was employed to accentuate explosions of tear gas bombs. For contrast, the camera was moved in to capture tight closeups of frenzied faces of prisoners as they reacted to the riot.

Closely tied with this action was that of U.S. Marines landing on "the rock" and taking up positions outside the prison walls. Key scenes for this sequence were shot—not at the actual prison site — but in rocky Bronson Canyon in the hills back of Hollywood, locale of countless movie exteriors.

A dramatic scene in which Stroud appears at a shattered window talking to prison officials below was shot on what was probably the simplest and least-costly set built for the entire picture. This consisted of a window section mounted on a high parallel in the canyon locale. The camera was mounted on the parallel to shoot past convict Stroud and include the prison officials on the ground in the distance—some forty feet below.

To shoot a sequence of scenes filmed on location in San Francisco Bay, which depicted the transfer of the Birdman from Alcatraz, Guffey employed the popular new Sun Gun Professional photo lamps, described in the May issue of *American Cinematographer*.

No Glamour Problems

In photographing "Birdman of Alcatraz" Guffey, who won an Academy Award in 1953 for black-and-white photography of "From Here To Eternity," never was concerned with the usual problems of photographically glamorizing the women in the cast, there were but two, both middle aged. In this aspect of the production, Guffey's problem was to effectively enhance pictorially the aging of star Burt Lancaster, who plays the Birdman, as he progresses from 20 years of age to more than 70 during the course of the story. Working closely with the make-up artist, Guffey pointed up the characterization with illumination that ranged from soft, flat lighting for the Birdman in his early twenties to sharp, contrasty lighting of the man in his seventies.

When asked about his concepts of effective set lighting, Guffey said: "I believe in keeping it simple. I have learned over a period of time and from some highly skilled cinematographers that the most striking results are attained by using as few lighting units as possible. I am not a strict advocate of source lighting. Very often when our problem is to glamorize a woman player, particularly if she is the star of the picture, it is necessary to place the lighting units where they will make her look her best—even though the established source light may be from another direction. But in general, I always aim to keep it simple." ■

NEW EASTMAN COLOR NEGATIVE AND PRINT FILMS

Continued from Page 363

ample, there will be virtually no operating differences. Type 5251 film is balanced for 3200°K tungsten lts speed is identical with the present, Type 5250 material.

The new negative material will provide slightly more exposure latitude since its sensitometric curve shows better linearity. Some slight differences in spectral sensitivity are shown between the new and old films (See illustrations). These are of minor significance but studios will want to make wardrobe and makeup tests before using the film for production.

For the print film, the spectral sensitivity is similar to 5382 except for amplitude (it is about four times faster). The big differences in the print stock will be in improved dye couplers which will tend to render the truer yellow and brighter greens and reds. Blues will be a shade darker

The over all quality of this new film system is sufficiently improved so that a 16mm color negative material will be made available on a "special order" basis for the first time in history While the image quality realized with this product will not be up to the standards which can be achieved with the new 35mm negative, there may be places where the 16mm product will serve a useful purpose Persons considering the use of 16mm color negative film should be warned that quality falls off sharply with use of master positive and duplicate negative stages

The emulsion of the 16mm color negative is identical with the 35mm product. Though the quality which can be achieved from the 16mm film is largely marginal, the very fact that it is feasible to use color negative film in this size indicates the great reduction in the granularity of the new Type 5251 film

THE FACTS AT A GLANCE
35mm & 16mm Eastman Color Negative Film, Type 5251

Type of film Speed:	Subtractive color negative 50 tung 32 dayl (with Wratten No 85)
Grain	Significantly improved over previous color negative films
Reproduction characteristics:	Better flesh tone reproduction Slightly different rendition of certain colors Slightly improved latitude
Processing requirements	Fully compatible with existing materials

In the laboratories, the new films will find an easy transition. Both materials can be processed in the same chemicals used for present color negative and print films. Processing times and procedures remain the same

Printer balance will have to be modified somewhat in using the new materials. More yellow will have to be added to filter packs This transition, however, will be made quickly. By the time the new negative is in general distribution, filter packs will have been completely adjusted for the delivery of balanced Cinex strips to cameramen and timers

General trade distribution of Eastman Color Negative Film, Type 5251, will begin in July. Following established custom. the material will be phased into use gradually. Transition should be completed around the beginning of 1963.

With the new print films, distribution will begin in September The materials are expected to be in general use by March or April of 1963. ■

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BEHIND THE CAMERAS

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CLIFFORD STINE, ASC, "The Ugly American" (Eastman Color) with Marlon Brando and Sandra Church. George Englund, producer director.

RAY FLIN, "It's A Man's World"*

RUSSELL HARLAN, ASC, 'To Kill A Mockingbird" (Pakula-Mulligan-Anthony Prods.) with Gregory Peck and Mark Badham. Robert Mulligan, director.

ERNEST LASZLO, ASC, "It's A Mad, Mad, Mad Mad World" (P'Vision-Technicolor, Stanley Kramer Prods.) with Spencer Tracy and Milton Berle. Stanley Kramer, producer director

JOSEPH MACDONALD ASC "40 Pounds of Trouble" (Curtis Enterprises Prods., P'Vision-Eastman Color) with Tony Curtis and Phil Silvers. Norman Newtson director

LEE GARMES, ASC, "Ten Girls Ago" (Am Can Prod., shooting in Canada) with Berl Lahr and Dion. Harold Daniels, director

ELLIS THACKERY, ASC, "Checkmate *

JOHN WARREN, ASC, ELLIS THACKERY ASC, "Wells Fargo"*

WALTER STRENGE, ASC, ROBERT GOUGH, "Wagon Train"*

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LEON SHAMROY, ASC, 'Cleopatra" (J. Mankiewicz Prod., Todd AO, shooting in Rome) with Elizabeth Taylor and Richard Burton. Joseph Mankiewicz director

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CHARLES LANG, ASC, "Critic's Choice" (P'Vision-Technicolor) with Bob Hope and Lucille Ball. Don Weis, director

CARL GUTHRIE ASC, HAROLD STINE, ASC, LEWIS JENNINGS, BURT GLENNON "77 Sunset Strip"*

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PHIL LATHROP, ASC, "Days of Wine and Roses" (Martin Manulis-Jalem Prod., shooting at Bay Meadows) with Jack Lemmon and Lee Remick. Blake Edwards, director

HARRY STRADLING ASC, "Gypsy" Mervyn LeRoy Prod. Technicolor) with Rosalind Russell and Karl Malden. Mervyn LeRoy director

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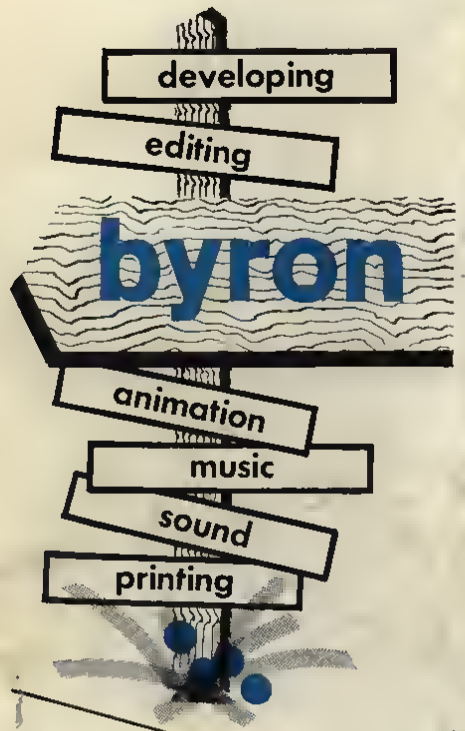

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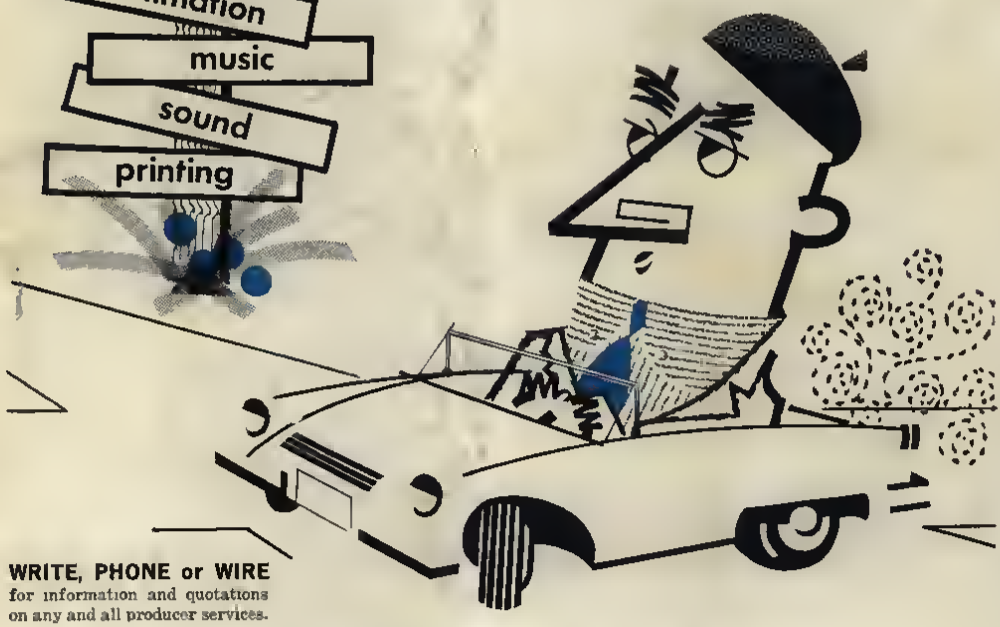

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